

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: March 1, 2004, 15:21:58 ; Search time 34 seconds
(without alignments)

3.354 Million cell updates/sec

Title: us-09-695-451-1

Perfect score: 2161

Sequence: 1 tggccagtgatctgaacc.....tacactaaaattctgaagtt 2161

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 1664 seqs, 26385 residues

Total number of hits satisfying chosen parameters: 3328

Minimum DB seq length: 8

Maximum DB seq length: 80

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1745 summaries

Database : rng.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
C 1	25	1.2	25	1	Reverse primer use
C 2	23.8	1.1	29	1	Human 55kDa tumour
C 3	23.8	1.1	29	1	Human 55 kD TNFpB
C 4	21	1.0	21	1	Primer for TPO/hCG
C 5	21	1.0	21	1	Tumour differentiation
C 6	21	1.0	29	1	Human TNFRI PCR pr
C 7	20.8	1.0	24	1	Multimerisation of
C 8	20	0.9	28	1	Antisense PCR prim
C 9	19.2	0.9	24	1	Multimerisation of
C 10	19.2	0.9	27	1	PCR primer used to
C 11	18.8	0.9	24	1	Multimerisation of
C 12	18.2	0.8	23	1	Cell-TRAP method a
C 13	18.2	0.8	25	1	HSV replication in
C 14	18.2	0.8	25	1	HSV replication in
C 15	18.2	0.8	25	1	Peptide nucleic ac
C 16	18	0.8	18	1	p55 extracellular
C 17	18	0.8	18	1	3' primer for p55
C 18	18	0.8	18	1	Primer used to con
C 19	18	0.8	18	1	Human TNFRI mRNA i
C 20	18	0.8	18	1	Human TNFRI mRNA i
C 21	18	0.8	18	1	Human TNFRI mRNA i
C 22	18	0.8	18	1	Human TNFRI mRNA i
C 23	18	0.8	18	1	Human TNFRI mRNA i
C 24	18	0.8	18	1	Human TNFRI mRNA i
C 25	18	0.8	18	1	Human TNFRI mRNA i
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C 27	18	0.8	18	1	Human TNFRI mRNA i
C 28	18	0.8	18	1	Human TNFRI mRNA i
C 29	18	0.8	18	1	Human TNFRI mRNA i
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C 31	18	0.8	18	1	Human TNFRI mRNA i
C 32	18	0.8	18	1	Human TNFRI mRNA i
C 33	18	0.8	18	1	Human TNFRI mRNA i

C 34	18	0.8	18	1	AAZ48526	Human TNFRI mRNA i
C 35	18	0.8	18	1	AAZ48529	Human TNFRI mRNA i
C 36	18	0.8	18	1	AAZ48543	Human TNFRI mRNA i
C 37	18	0.8	18	1	AAZ48523	Human TNFRI mRNA i
C 38	18	0.8	18	1	AAZ48536	Human TNFRI mRNA i
C 39	18	0.8	18	1	AAZ48542	Human TNFRI mRNA i
C 40	18	0.8	18	1	AAZ48521	Human TNFRI mRNA i
C 41	18	0.8	18	1	AAZ48531	Human TNFRI mRNA i
C 42	18	0.8	18	1	AAZ48530	Human TNFRI mRNA i
C 43	18	0.8	18	1	AAI65708	PCR primer used to
C 44	18	0.8	18	1	AAI18201	p55 heavy chain fu
C 45	18	0.8	18	1	AAH78601	PCR primer used to
C 46	18	0.8	18	1	ABSS4265	Human p55 heavy/li
C 47	18	0.8	18	1	ABT05021	TNFR1 expression m
C 48	18	0.8	18	1	ABT05032	TNFR1 expression m
C 49	18	0.8	18	1	ABT05034	TNFR1 expression m
C 50	18	0.8	18	1	ABT05037	TNFR1 expression m
C 51	18	0.8	18	1	ABT05107	TNFR1 expression m
C 52	18	0.8	18	1	ABT05108	TNFR1 expression m
C 53	18	0.8	18	1	ABT05109	TNFR1 expression m
C 54	18	0.8	18	1	ABT05026	TNFR1 expression m
C 55	18	0.8	18	1	ABT05029	TNFR1 expression m
C 56	18	0.8	18	1	ABT05081	TNFR1 expression m
C 57	18	0.8	18	1	ABT05103	TNFR1 expression m
C 58	18	0.8	18	1	ABT05086	TNFR1 expression m
C 59	18	0.8	18	1	ABT05088	TNFR1 expression m
C 60	18	0.8	18	1	ABT05091	TNFR1 expression m
C 61	18	0.8	18	1	ABT05098	TNFR1 expression m
C 62	18	0.8	18	1	ABT05093	TNFR1 expression m
C 63	18	0.8	18	1	ABT05017	TNFR1 expression m
C 64	18	0.8	18	1	ABT05035	TNFR1 expression m
C 65	18	0.8	18	1	ABT05084	TNFR1 expression m
C 66	18	0.8	18	1	ABT05100	TNFR1 expression m
C 67	18	0.8	18	1	ABT05105	TNFR1 expression m
C 68	18	0.8	18	1	ABT05106	TNFR1 expression m
C 69	18	0.8	18	1	ABT05020	TNFR1 expression m
C 70	18	0.8	18	1	ABT05031	TNFR1 expression m
C 71	18	0.8	18	1	ABT05039	TNFR1 expression m
C 72	18	0.8	18	1	ABT05040	TNFR1 expression m
C 73	18	0.8	18	1	ABT05096	TNFR1 expression m
C 74	18	0.8	18	1	ABT05113	TNFR1 expression m
C 75	18	0.8	18	1	ABT05028	TNFR1 expression m
C 76	18	0.8	18	1	ABT05087	TNFR1 expression m
C 77	18	0.8	18	1	ABT05094	TNFR1 expression m
C 78	18	0.8	18	1	ABT05097	TNFR1 expression m
C 79	18	0.8	18	1	ABT05024	TNFR1 expression m
C 80	18	0.8	18	1	ABT05027	TNFR1 expression m
C 81	18	0.8	18	1	ABT05030	TNFR1 expression m
C 82	18	0.8	18	1	ABT05038	TNFR1 expression m
C 83	18	0.8	18	1	ABT05082	TNFR1 expression m
C 84	18	0.8	18	1	ABT05085	TNFR1 expression m
C 85	18	0.8	18	1	ABT05101	TNFR1 expression m
C 86	18	0.8	18	1	ABT05111	TNFR1 expression m
C 87	18	0.8	18	1	ABT05112	TNFR1 expression m
C 88	18	0.8	18	1	ABT05019	TNFR1 expression m
C 89	18	0.8	18	1	ABT05022	TNFR1 expression m
C 90	18	0.8	18	1	ABT05036	TNFR1 expression m
C 91	18	0.8	18	1	ABT05102	TNFR1 expression m
C 92	18	0.8	18	1	ABT05033	TNFR1 expression m
C 93	18	0.8	18	1	ABT05083	TNFR1 expression m
C 94	18	0.8	18	1	ABT05023	TNFR1 expression m
C 95	18	0.8	18	1	ABT05025	TNFR1 expression m
C 96	18	0.8	18	1	ABT05090	TNFR1 expression m
C 97	18	0.8	18	1	ABT05099	TNFR1 expression m
C 98	18	0.8	18	1	ABT05018	TNFR1 expression m
C 99	18	0.8	18	1	ABT05089	TNFR1 expression m
C 100	18	0.8	18	1	ABT05110	TNFR1 expression m
C 101	18	0.8	18	1	ABT05114	TNFR1 expression m
C 102	18	0.8	18	1	ABT05092	TNFR1 expression m
C 103	18	0.8	18	1	ABT05095	TNFR1 expression m
C 104	18	0.8	18	1	ABT05104	TNFR1 expression m
C 105	18	0.8	18	1	ABV73805	Human tumour necro
C 106	18	0.8	18	1	AAI72618	p55 fusion protein

C 107 18 0.8 18 1 ACA61161 Human TNF-alpha re
 C 108 18 0.8 18 1 ABX14797 p55 extracellular
 C 109 18 0.8 18 1 ABX11358 PCR primer, #8, us
 C 110 18 0.8 18 1 ABX11374 PCR primer, #7, us
 C 111 18 0.8 18 1 AD28380 Human p55 extracel
 C 112 18 0.8 18 1 ADC46582 Heavy chain fusion
 C 113 18 0.8 18 1 ADC61368 PCR primer #2 used
 C 114 18 0.8 18 1 ADD44668 p55 extracellular
 C 115 18 0.8 18 1 AAZ48498 Human TNFRL mRNA i
 C 116 18 0.8 18 1 ABT04594 TNFRL expression m
 C 117 18 0.8 24 1 AAT30782 TNF-RL cytoplasmic
 C 118 17.8 0.8 23 1 AAQ03929 HPV11 typing probe
 C 119 17.8 0.8 23 1 AAQ03928 HPV11 typing probe
 C 120 17.8 0.8 23 1 AAQ56399 L1 consensus prime
 C 121 17.8 0.8 23 1 AAQ56400 L1 consensus prime
 C 122 17.8 0.8 23 1 AAT10824 Human papilloma vi
 C 123 17.8 0.8 23 1 AAT10825 Human papilloma vi
 C 124 17.8 0.8 23 1 AAT44771 HPV typing probe W
 C 125 17.8 0.8 23 1 AAT44770 HPV typing probe W
 C 126 17.8 0.8 23 1 AAT78015 Human papillomavir
 C 127 17.8 0.8 23 1 AAT78014 Human papillomavir
 C 128 17.8 0.8 23 1 AAV17415 Probe WD151 for hu
 C 129 17.8 0.8 23 1 AAV17415 Probe WD150 for hu
 C 130 17.8 0.8 24 1 AAV55819 Multimerisation of
 C 131 17.8 0.8 24 1 ADE68055 G4 phosphorothioat
 C 132 17.6 0.8 24 1 ABK16809 Human protein ref
 C 133 17.4 0.8 20 1 ABT05167 TNFRL expression m
 C 134 17.2 0.8 22 1 AAQ61991 Guanine quartet co
 C 135 17.2 0.8 22 1 AAQ61991 Guanine quartet co
 C 136 17.2 0.8 22 1 AAQ61895 HSV replication in
 C 137 17.2 0.8 22 1 AAQ61903 Peptide nucleic ac
 C 138 17.2 0.8 22 1 AAQ97987 Anti-HSV-1 G4 olig
 C 139 17.2 0.8 24 1 AAQ61902 HSV replication in
 C 140 17.2 0.8 24 1 AAQ61890 Guanine quartet co
 C 141 17.2 0.8 24 1 AAQ61894 HSV replication in
 C 142 17.2 0.8 24 1 AAQ61991 Guanine quartet co
 C 143 17.2 0.8 24 1 AAQ61997 Peptide nucleic ac
 C 144 17.2 0.8 24 1 AAQ97981 Minimal motif codi
 C 145 17.2 0.8 24 1 AAV55813 Multimerisation of
 C 146 17.2 0.8 24 1 ADB68048 G4 phosphorothioat
 C 147 17.2 0.8 24 1 ABT05122 TNFRL expression m
 C 148 17 0.8 18 1 ABT05122 Mouse HYPLIPI locu
 C 149 16.8 0.8 21 1 ABK68350 Murine Spot14 codi
 C 150 16.8 0.8 21 1 AAL49018 Mouse HYPLIPI locu
 C 151 16.8 0.8 21 1 ABK71254 Mouse HYPLIPI locu
 C 152 16.8 0.8 21 1 ADA15393 Mouse HYPLIPI locu
 C 153 16.8 0.8 21 1 ADB59555 Mouse HYPLIPI PCR
 C 154 16.4 0.8 18 1 ABT05121 TNFRL expression m
 C 155 16.2 0.7 21 1 AAH62672 Glucosidase alpha
 C 156 15 0.7 18 1 ABT05123 TNFRL expression m
 C 157 15.8 0.7 20 1 ABT05169 TNFRL expression m
 C 158 15.8 0.7 20 1 ABT05171 TNFRL expression m
 C 159 15.8 0.7 20 1 ABZ87732 Human oligonucleot
 C 160 15.8 0.7 20 1 ACF39510 BARCODE-WAT HPV re
 C 161 15.8 0.7 22 1 AAH51522 Zea mays genome fo
 C 162 15.8 0.7 22 1 RAD54478 Soybean RRS gene N
 C 163 15.6 0.7 22 1 AAH71903 Soybean cytochrome
 C 164 15.6 0.7 22 1 AAX82809 RRS nucleic acid f
 C 165 15.6 0.7 22 1 ACC69308 RRS nucleic acid f
 C 166 15.4 0.7 17 1 AAX74507 Mouse flt-1 VEGF r
 C 167 15.4 0.7 17 1 ACD50663 HBV hammerhead rib
 C 168 15.4 0.7 18 1 AAT16398 Primer #1 for swSS
 C 169 15.4 0.7 18 1 AAC62593 Human OB gene sequ
 C 170 15.4 0.7 18 1 AAAL2315 Human OB DNA PCR p
 C 171 15.4 0.7 18 1 AAC62673 Human OB gene sequ
 C 172 15.4 0.7 18 1 ABL61421 Human sequence tag
 C 173 15.4 0.7 18 1 ABX89547 Human OB gene STS
 C 174 15.4 0.7 18 1 ABL61421 Human obese (ob) g
 C 175 15.4 0.7 19 1 AAB56407 Cyclin B1 ribozyme
 C 176 15.4 0.7 19 1 AAH56678 Cyclin B1 ribozyme
 C 177 15.4 0.7 20 1 AAH60840 Anti-HSV-1 G4 olig
 C 178 15.4 0.7 20 1 AAQ61999 Guanine quartet co
 C 179 15.4 0.7 20 1 AAQ61896 HSV replication in

C 180 15.4 0.7 20 1 AAQ61995 Guanine quartet co
 C 181 15.4 0.7 20 1 AAQ61904 HSV replication in
 C 182 15.4 0.7 20 1 AAQ97982 Peptide nucleic ac
 C 183 15.4 0.7 20 1 AAF56086 HBV DNA polymerase
 C 184 15.4 0.7 20 1 ABQ92981 T. tauschii/wheat
 C 185 15.2 0.7 20 1 AAZ56188 Antisense oligonuc
 C 186 15.2 0.7 20 1 ABS55159 Cow calpastatin (C
 C 187 15.2 0.7 20 1 ABX12684 Human IL-4/IL-13 r
 C 188 15.2 0.7 20 1 ADB97971 Human K-Ras codon
 C 189 15.2 0.7 21 1 AAZ74370 Human biallelic ma
 C 190 15.2 0.7 21 1 ABS98379 Human multidiag re
 C 191 15 0.7 18 1 AAV14108 Probe HBR274 for
 C 192 15 0.7 18 1 ABT05120 TNFRL expression m
 C 193 15 0.7 19 1 AAV10706 Human breast cance
 C 194 15 0.7 20 1 AAV14301 Probe HBR135 for
 C 195 15 0.7 20 1 AAD09117 Hepatitis B virus
 C 196 15 0.7 20 1 AAH77555 S' PCR primer for
 C 197 14.8 0.7 18 1 AAT90589 HBSPol/HBSPAG re
 C 198 14.8 0.7 18 1 AAB13406 Hepatitis C virus
 C 199 14.8 0.7 18 1 ABX74325 Dog genomic marker
 C 200 14.8 0.7 19 1 AAA66673 Human CYP2C8 SNP d
 C 201 14.8 0.7 19 1 ACA98830 Human CYP2C8 SNP d
 C 202 14.8 0.7 19 1 ACA98827 Forward primer for
 C 203 14.8 0.7 20 1 AAS45887 Human PARP-3 antis
 C 204 14.8 0.7 20 1 AAD19265 PCR primer #5, to
 C 205 14.8 0.7 20 1 AAD19261 PCR primer #1, to
 C 206 14.8 0.7 20 1 AAD19263 PCR primer #3, to
 C 207 14.8 0.7 20 1 ABL58392 Fanconi anaemia FA
 C 208 14.8 0.7 20 1 ABT13217 Human PDE7a3 spli
 C 209 14.8 0.7 20 1 ABL58392 Capture oligonucle
 C 210 14.8 0.7 20 1 AB196012 Human NOV7 forward
 C 211 14.8 0.7 20 1 ABN86953 Mouse phospholipid
 C 212 14.8 0.7 20 1 AAD49357 FANCD2 PCR primer
 C 213 14.8 0.7 20 1 ADC42454 Antisense oligonuc
 C 214 14.8 0.7 21 1 AAQ58370 Recombinant HIV-1
 C 215 14.8 0.7 21 1 AAZ21375 HIV-1
 C 216 14.8 0.7 21 1 AAF82554 RT-PCR primer #2 f
 C 217 14.8 0.7 21 1 ADE13666 PCR primer for det
 C 218 14.8 0.7 21 1 ADE86064 Anti-HSV-1 G4 olig
 C 219 14.4 0.7 16 1 AAQ73380 Guanine quartet co
 C 220 14.4 0.7 16 1 AAQ61993 HSV replication in
 C 221 14.4 0.7 16 1 AAQ61898 HIV replication in
 C 222 14.4 0.7 16 1 AAQ61914 Peptide nucleic ac
 C 223 14.4 0.7 16 1 AAQ97986 Human NOD inozyme
 C 224 14.4 0.7 17 1 ABK00810 Human tumour suppr
 C 225 14.4 0.7 17 1 ACC51738 PCR primer #14 use
 C 226 14.4 0.7 17 1 AAD53249 HBV hammerhead rib
 C 227 14.4 0.7 17 1 ACD50662 Thermus scotoductu
 C 228 14.4 0.7 17 1 ADA50406 Tumour osimal nu
 C 229 14.4 0.7 17 1 AAT79937 Tumour suppression
 C 230 14.4 0.7 17 1 ADB44463 Anti-HSV-1 G4 olig
 C 231 14.4 0.7 18 1 AAQ73381 Guanine quartet co
 C 232 14.4 0.7 18 1 AAQ61992 HSV replication in
 C 233 14.4 0.7 18 1 AAQ61897 HIV replication in
 C 234 14.4 0.7 18 1 AAQ61913 Peptide nucleic ac
 C 235 14.4 0.7 18 1 AAQ37983 Primer oligo used
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 C 237 14.4 0.7 19 1 AAA38182 Cyclin B1 ribozyme
 C 238 14.4 0.7 19 1 AAH56577 Human CYP2C8 SNP d
 C 239 14.4 0.7 19 1 ACA98826 Human HCV RNA anti
 C 240 14.4 0.7 19 1 AAV19519 Retroviral DNA bas
 C 241 14.4 0.7 20 1 AAV32006 Flax SAD gene prom
 C 242 14.4 0.7 20 1 AAV22562 Antisense oligonuc
 C 243 14.4 0.7 20 1 AAT87852 Human ABC1 gene ex
 C 244 14.4 0.7 20 1 AAV19519 Ribonucleotide red
 C 245 14.4 0.7 20 1 AAC69238 Human 52F transcri
 C 246 14.4 0.7 20 1 AAG67181 Human ankryrin 4 cd
 C 247 14.4 0.7 20 1 AAB54859 Cdc 25 hs ribozyme
 C 248 14.4 0.7 20 1 AAA90791 Bacterial cell ide
 C 249 14.4 0.7 20 1 AAG67181
 C 250 14.4 0.7 20 1 AAB54859
 C 251 14.2 0.7 19 1 AAA85941
 C 252 14.2 0.7 19 1 AAD16173

Guanine quartet co
 HSV replication in
 Peptide nucleic ac
 HBV DNA polymerase
 T. tauschii/wheat
 Antisense oligonuc
 Cow calpastatin (C
 Human IL-4/IL-13 r
 Human K-Ras codon
 Human biallelic ma
 Human multidiag re
 Probe HBR274 for
 TNFRL expression m
 Human breast cance
 Probe HBR135 for
 Hepatitis B virus
 S' PCR primer for
 HBSPol/HBSPAG re
 Hepatitis C virus
 Dog genomic marker
 Human CYP2C8 SNP d
 Human CYP2C8 SNP d
 Forward primer for
 Human PARP-3 antis
 PCR primer #5, to
 PCR primer #1, to
 PCR primer #3, to
 Fanconi anaemia FA
 Human PDE7a3 spli
 Capture oligonucle
 Human NOV7 forward
 Mouse phospholipid
 FANCD2 PCR primer
 Antisense oligonuc
 Recombinant HIV-1
 HIV-1
 RT-PCR primer #2 f
 PCR primer for det
 Anti-HSV-1 G4 olig
 Guanine quartet co
 HSV replication in
 HIV replication in
 Peptide nucleic ac
 Human NOD inozyme
 Human tumour suppr
 PCR primer #14 use
 HBV hammerhead rib
 HBV hammerhead rib
 Thermus scotoductu
 Tumour osimal nu
 Tumour suppression
 Anti-HSV-1 G4 olig
 Guanine quartet co
 HSV replication in
 HIV replication in
 Peptide nucleic ac
 Primer oligo used
 Cyclin B1 ribozyme
 Cyclin B1 ribozyme
 Human CYP2C8 SNP d
 Human HCV RNA anti
 Retroviral DNA bas
 Flax SAD gene prom
 Antisense oligonuc
 Human ABC1 gene ex
 Ribonucleotide red
 Human 52F transcri
 Human ankryrin 4 cd
 Cdc 25 hs ribozyme
 Bacterial cell ide

C 253	14.2	0.7	19	1	AAH61103	Cdc25 hs ribozyme	326	13.4	0.6	18	1	AAZ70729	Human biallelic ma
C 254	14.2	0.7	19	1	AAH70533	Human TREK-2 fragmen	C 327	13.4	0.6	18	1	ABZ75036	Mus musculus/Mus s
C 255	14.2	0.7	19	1	AAH74745	Human DREK-2 gene	C 328	13.4	0.6	18	1	ACC79763	Mus musculus/Mus s
C 256	14.2	0.7	20	1	AAH11921	Hepatocyte growth	C 329	13.4	0.6	18	1	ADB54870	Hybridisation olig
C 257	14.2	0.7	20	1	AAH11923	Hepatocyte growth	C 330	13.4	0.6	18	1	ADB43557	Human IDE sequenci
C 258	14.2	0.7	20	1	AAH11995	Human uncoupling p	C 331	13.4	0.6	19	1	AAQ20002	Oligomer A2-A able
C 259	14.2	0.7	20	1	AAH96519	PCR primer used to	C 332	13.4	0.6	19	1	AAQ20057	Human biallelic po
C 260	14.2	0.7	20	1	AAH95335	PCR primer used to	C 333	13.4	0.6	19	1	AAQ09895	Human biallelic po
C 261	14.2	0.7	20	1	AAH93087	PCR primer used to	C 334	13.4	0.6	19	1	AAZ72906	Human biallelic ma
C 262	14.2	0.7	20	1	AAH93571	HIV-1 protease gen	C 335	13.4	0.6	19	1	AAQ09709	Cryptosporidium pa
C 263	14.2	0.7	20	1	AAH72760	Human biallelic ma	C 336	13.4	0.6	19	1	AAH62156	Lam K U primer SEQ
C 264	14.2	0.7	20	1	AAH49112	Human procacitoni	C 337	13.4	0.6	19	1	ABA91977	Single nucleotide
C 265	14.2	0.7	20	1	AAH21385	Antisense oligo, H	C 338	13.4	0.6	19	1	ACA98752	Human IIS-R oligon
C 266	14.2	0.7	20	1	AAH30573	Human glioma-associ	C 339	13.4	0.6	19	1	ACA98749	Human CYP2C8 SNP d
C 267	14.2	0.7	20	1	AAH37207	Human MKK4 antisense	C 340	13.4	0.6	19	1	AAH94551	Human CYP2C8 SNP d
C 268	14.2	0.7	20	1	AAH73834	Phosphorothioate o	C 341	13.2	0.6	18	1	AAH93339	Human RAD54 mutat
C 269	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 342	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 270	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 343	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 271	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 344	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 272	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 345	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 273	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 346	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 274	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 347	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 275	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 348	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 276	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 349	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 277	14.2	0.7	20	1	AAH291126	Human oligonucleot	C 350	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 278	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 351	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 279	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 352	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 280	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 353	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 281	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 354	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 282	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 355	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 283	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 356	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 284	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 357	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 285	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 358	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 286	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 359	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 287	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 360	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 288	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 361	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 289	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 362	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 290	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 363	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 291	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 364	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 292	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 365	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 293	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 366	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 294	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 367	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 295	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 368	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 296	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 369	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 297	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 370	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 298	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 371	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 299	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 372	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 300	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 373	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 301	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 374	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 302	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 375	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 303	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 376	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 304	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 377	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 305	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 378	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 306	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 379	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 307	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 380	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 308	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 381	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 309	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 382	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 310	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 383	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 311	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 384	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 312	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 385	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 313	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 386	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 314	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 387	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 315	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 388	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 316	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 389	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 317	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 390	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 318	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 391	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 319	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 392	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 320	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 393	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 321	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 394	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 322	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 395	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 323	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 396	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 324	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 397	13.2	0.6	18	1	AAH217892	RT-PCR primer spec
C 325	13.8	0.6	17	1	AAH291126	Human oligonucleot	C 398	13.2	0.6	18	1	AAH217892	RT-PCR primer spec

C 399	12.8	0.6	17	1	ABAV79720	Factor IX mutation	472	12.4	0.6	14	1	AAV22315	14 base loop seque
C 400	12.8	0.6	17	1	ABAV79724	Factor IX mutation	473	12.4	0.6	14	1	AAV57019	Human Notch3 gene
C 401	12.8	0.6	17	1	ABAV79725	Factor IX mutation	474	12.4	0.6	14	1	ABK99293	Hepatitis C virus
C 402	12.8	0.6	17	1	ABAV79721	Factor IX mutation	475	12.4	0.6	14	1	ADE13944	Optineurin promote
C 403	12.8	0.6	17	1	ABN02791	Human GMPLP-1 17-m	C 476	12.4	0.6	15	1	AAQ30739	DNA/RNA expression
C 404	12.8	0.6	17	1	ABN000978	Human GMPLP-1 17-m	C 477	12.4	0.6	15	1	AAQ30739	DNA/RNA expression
C 405	12.8	0.6	17	1	ABN02790	Human GMPLP-1 17-m	C 478	12.4	0.6	15	1	AAQ28330	DNA EDTA probe (8)
C 406	12.8	0.6	17	1	ABV83095	Human HTPL scannin	C 479	12.4	0.6	15	1	AAQ60194	Target DNA for pvr
C 407	12.8	0.6	17	1	ABV79664	Human HTPL scannin	C 480	12.4	0.6	15	1	AAQ62403	Ab6 variable heavy
C 408	12.8	0.6	17	1	ABV79665	Human HTPL scannin	C 481	12.4	0.6	15	1	AAQ29446	Substrate for HH r
C 409	12.8	0.6	17	1	ABV83096	Human HTPL scannin	C 482	12.4	0.6	15	1	AAQ47941	Hepatitis C virus
C 410	12.8	0.6	17	1	ABV80008	Human HTPL scannin	C 483	12.4	0.6	15	1	AAQ47946	IGFBP3 oligonucleo
C 411	12.8	0.6	17	1	ABV80009	Human HTPL scannin	C 484	12.4	0.6	15	1	AAQ49432	IGFBP3 oligonucleo
C 412	12.8	0.6	17	1	ABK19288	Human HTPL scannin	C 485	12.4	0.6	15	1	AAQ45599	IGF-I oligonucleot
C 413	12.8	0.6	17	1	ABK19007	Human ERG DNazyme	C 486	12.4	0.6	15	1	AAQ45600	IGFBP2 oligonucleo
C 414	12.8	0.6	17	1	ABL31567	Human HLA genotypi	C 487	12.4	0.6	15	1	AAQ49842	IGFBP2 oligonucleo
C 415	12.8	0.6	17	1	ADL48146	DNA P target DNA u	C 488	12.4	0.6	15	1	AAQ49431	IGF-I oligonucleot
C 416	12.8	0.6	17	1	ABT38079	Tumour suppression	C 489	12.4	0.6	15	1	AAQ46484	IGFBP2 oligonucleo
C 417	12.8	0.6	17	1	ACA06572	NFKB sub-unit modu	C 490	12.4	0.6	15	1	AAQ49843	IGF-I oligonucleot
C 418	12.8	0.6	17	1	ACA08290	NFKB sub-unit modu	C 491	12.4	0.6	15	1	AAQ46485	IGFBP2 oligonucleo
C 419	12.8	0.6	17	1	ACA06571	NFKB sub-unit modu	C 492	12.4	0.6	15	1	ABX00259	Hepatitis C virus
C 420	12.8	0.6	17	1	ACA06765	NFKB sub-unit modu	C 493	12.4	0.6	15	1	ABX01756	Hepatitis C virus
C 421	12.8	0.6	17	1	ACA06256	NFKB sub-unit modu	C 494	12.4	0.6	15	1	ABX01757	Hepatitis C virus
C 422	12.8	0.6	17	1	ACD06763	NFKB sub-unit modu	C 495	12.4	0.6	15	1	ABX16337	Sequence specific
C 423	12.8	0.6	17	1	ADB04345	Human MD27 scannin	C 496	12.4	0.6	15	1	ABX16337	DNase footprint ta
C 424	12.8	0.6	17	1	ADB04344	Human MD27 scannin	C 497	12.4	0.6	15	1	AB275384	Synthetic nuclease
C 425	12.8	0.6	17	1	ADB05115	Human MD212 scanni	C 498	12.4	0.6	15	1	ADCL1352	Beta-3-Gla T3 exon
C 426	12.8	0.6	17	1	ADA99613	Human MD23 scannin	C 499	12.4	0.6	16	1	AAQ93899	Validation ribozym
C 427	12.8	0.6	17	1	AD05114	Human MD23 scannin	C 500	12.4	0.6	16	1	AAQ93899	Human NKG2B
C 428	12.8	0.6	17	1	ADA99614	Human MD23 scannin	C 501	12.4	0.6	16	1	AAQ93899	Human NKG2B
C 429	12.8	0.6	17	1	ABZ64922	Human HER2 DNazyme	C 502	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 430	12.8	0.6	17	1	ABZ61891	Human H-Ras DNazyme	C 503	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 431	12.8	0.6	17	1	ABZ60690	Human K-Ras DNazyme	C 504	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 432	12.8	0.6	17	1	ABZ64908	Human K-Ras DNazyme	C 505	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 433	12.8	0.6	17	1	ACD63373	HCV minus strand D	C 506	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 434	12.8	0.6	17	1	ACD82296	HCV minus strand D	C 507	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 435	12.8	0.6	17	1	ACD54753	HBV DNazyme substr	C 508	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 436	12.8	0.6	17	1	ACG64156	Murine oligonucleo	C 509	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 437	12.8	0.6	17	1	ACB98958	LRP5 mutagenic PCR	C 510	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 438	12.8	0.6	17	1	ADB43905	Tumour suppression	C 511	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 439	12.8	0.6	17	1	ADC03565	Human Na/H exchange	C 512	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 440	12.8	0.6	17	1	ADC03566	Human Na/H exchange	C 513	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 441	12.8	0.6	17	1	ADB44188	Tumour suppression	C 514	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 442	12.8	0.6	18	1	AAQ74284	Anyloid precursor	C 515	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 443	12.8	0.6	18	1	AAV12463	Human HP4 prostagl	C 516	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 444	12.8	0.6	18	1	AAV72786	Corn kernel oil co	C 517	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 445	12.8	0.6	18	1	AAZ28111	PCR primer for M.	C 518	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 446	12.8	0.6	18	1	AAZ41037	Cellular inhibitor	C 519	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 447	12.8	0.6	18	1	AAZ40886	Human CD40 phospho	C 520	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 448	12.8	0.6	18	1	AAZ31867	Human G-alpha-13 a	C 521	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 449	12.8	0.6	18	1	AAZ22131	Human C-IAP-2 mRNA	C 522	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 450	12.8	0.6	18	1	AAZ47719	Human CD40 antisen	C 523	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 451	12.8	0.6	18	1	AAZ75429	Human biallelic ma	C 524	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 452	12.8	0.6	18	1	AAZ75429	Human biallelic ma	C 525	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 453	12.8	0.6	18	1	AAZ69900	Human biallelic ma	C 526	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 454	12.8	0.6	18	1	AAZ37653	PCR primer PFX520	C 527	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 455	12.8	0.6	18	1	AAZ47719	Midline PCR primer	C 528	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 456	12.8	0.6	18	1	AAZ25547	Human IGFBP-3 inte	C 529	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 457	12.8	0.6	18	1	ABK88473	Human HP4 prostagl	C 530	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 458	12.8	0.6	18	1	ABK15756	Prostaglandin rece	C 531	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 459	12.8	0.6	18	1	ABK05926	Escherichia coli y	C 532	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 460	12.8	0.6	18	1	ABK05926	PCR primer #2 for	C 533	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 461	12.8	0.6	18	1	ACF62995	Human p16 PCR prim	C 534	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 462	12.8	0.6	18	1	ACF62995	Human p16 PCR prim	C 535	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 463	12.8	0.6	18	1	ABK394542	23S/16S rRNA detec	C 536	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 464	12.8	0.6	18	1	AAZ50970	DM21 primer, to de	C 537	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 465	12.8	0.6	18	1	ADB54573	Primer oligo used	C 538	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 466	12.8	0.6	18	1	ADC70166	Primer oligo used	C 539	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 467	12.8	0.6	18	1	AAZ60507	Human IL5-R oligon	C 540	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 468	12.8	0.6	19	1	ABZ97610	Human IL5-R oligon	C 541	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 469	12.8	0.6	24	1	AAV55815	Multimerisation of	C 542	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 470	12.6	0.6	15	1	ABK95975	Human LIPSE gene po	C 543	12.4	0.6	17	1	AAQ93899	Human NKG2B
C 471	12.6	0.6	15	1	AAZ43373	Human CYP3A5 gene	C 544	12.4	0.6	17	1	AAQ93899	Human NKG2B

C 545	12.4	0.6	17	1	ACA07870	NFKB sub-unit modu	C 618	12.2	0.6	17	1	AAA36202	Human genomic SNP
C 546	12.4	0.6	17	1	ACA08331	NFKB sub-unit modu	619	12.2	0.6	17	1	AAA95865	Human Ki-ras antis
C 547	12.4	0.6	17	1	ACA09069	NFKB sub-unit modu	C 620	12.2	0.6	17	1	AAZ60922	PCR primer used to
C 548	12.4	0.6	17	1	ACA06257	NFKB sub-unit modu	621	12.2	0.6	17	1	AAA14476	PCR primer, SEQ ID
C 549	12.4	0.6	17	1	ACA08289	NFKB sub-unit modu	622	12.2	0.6	17	1	AAAF01972	Hammerhead ribozym
C 550	12.4	0.6	17	1	ABZ61864	Human H-Ras DNazyme	623	12.2	0.6	17	1	AAAF01972	Hammerhead ribozym
C 551	12.4	0.6	17	1	ABZ64930	Human HER2 DNazyme	C 624	12.2	0.6	17	1	AAAF01972	Hammerhead ribozym
C 552	12.4	0.6	17	1	ABZ61918	Human H-Ras DNazyme	C 625	12.2	0.6	17	1	AAAF02098	Hammerhead ribozym
C 553	12.4	0.6	17	1	ABZ65382	Human HER2 DNazyme	C 626	12.2	0.6	17	1	AAAF02098	Hammerhead ribozym
C 554	12.4	0.6	17	1	ABZ61530	Human H-Ras DNazyme	C 627	12.2	0.6	17	1	AAAF01964	Hammerhead ribozym
C 555	12.4	0.6	17	1	ACD50661	HBV hammerhead rib	C 628	12.2	0.6	17	1	AAAF01964	Hammerhead ribozym
C 556	12.4	0.6	17	1	ACD65750	HCV minus strand D	C 629	12.2	0.6	17	1	AAAF02604	Hammerhead ribozym
C 557	12.4	0.6	17	1	ACD54040	HBV zinzyme substr	630	12.2	0.6	17	1	AAAF07190	Hammerhead ribozym
C 558	12.4	0.6	17	1	ACD55368	HBV amberzyme subs	631	12.2	0.6	17	1	AAAF01928	Hammerhead ribozym
C 559	12.4	0.6	17	1	ACD51586	HBV hammerhead rib	C 632	12.2	0.6	17	1	AAAF07012	Hammerhead ribozym
C 560	12.4	0.6	17	1	ACD51587	HBV hammerhead rib	C 633	12.2	0.6	17	1	AAAF01929	Hammerhead ribozym
C 561	12.4	0.6	17	1	ACD566032	Murine oligonucleo	C 634	12.2	0.6	17	1	AAAF06045	Hammerhead ribozym
C 562	12.4	0.6	17	1	ACD67236	Murine oligonucleo	C 635	12.2	0.6	17	1	AAAF07060	Hammerhead ribozym
C 563	12.4	0.6	17	1	ADB42368	Tumour suppression	C 636	12.2	0.6	17	1	AAAF07118	Hammerhead ribozym
C 564	12.4	0.6	17	1	ADB43841	Tumour suppression	C 637	12.2	0.6	17	1	AAA70569	Shear Stress Respo
C 565	12.4	0.6	17	1	ADB40332	Tumour suppression	C 638	12.2	0.6	17	1	ABX03092	Human CD20 Inozyme
C 566	12.4	0.6	17	1	ADB41142	Tumour suppression	C 639	12.2	0.6	17	1	ABX01807	Human NOGO Zinzyme
C 567	12.4	0.6	17	1	ADB42329	Tumour suppression	C 640	12.2	0.6	17	1	ABA80784	LDLR mutation corr
C 568	12.4	0.6	17	1	ADB40653	Tumour suppression	C 641	12.2	0.6	17	1	ABA80785	LDLR mutation corr
C 569	12.4	0.6	17	1	ADC03827	Human Na/H exchang	C 642	12.2	0.6	17	1	AAAC91135	Fungal pathogenic
C 570	12.4	0.6	17	1	ADC03824	Human Na/H exchang	C 643	12.2	0.6	17	1	AAH48172	Human TNF-308 alle
C 571	12.4	0.6	17	1	ADC03826	Human Na/H exchang	C 644	12.2	0.6	17	1	AAAF54961	5' primer used to
C 572	12.4	0.6	17	1	ADC03825	Human Na/H exchang	C 645	12.2	0.6	17	1	AAAF54961	Probe FN(n)G used
C 573	12.4	0.6	17	1	ADB45380	Tumour suppression	C 646	12.2	0.6	17	1	AAAF54961	CGMV RT-PCR prime
C 574	12.4	0.6	17	1	ADB44338	Tumour suppression	C 647	12.2	0.6	17	1	ABN02042	Human GDMPLP-1 17-m
C 575	12.4	0.6	17	1	ADC70411	Primer oligo used	C 648	12.2	0.6	17	1	ABN00316	Human GDMPLP-1 17-m
C 576	12.4	0.6	17	1	ADC70430	Primer oligo used	C 649	12.2	0.6	17	1	ABN10596	Human GDMPLP-1 17-m
C 577	12.4	0.6	17	1	ADC70409	Primer oligo used	C 650	12.2	0.6	17	1	ABN06070	Human GDMPLP-1 17-m
C 578	12.4	0.6	17	1	ADB80969	Rabbit beta-globin	C 651	12.2	0.6	17	1	ABN08403	Human GDMPLP-1 17-m
C 579	12.4	0.6	17	1	ADB80970	Rabbit beta-globin	C 652	12.2	0.6	17	1	ABN01188	Human GDMPLP-1 17-m
C 580	12.4	0.6	17	1	ADB80968	Rabbit beta-globin	C 653	12.2	0.6	17	1	ABN02688	Human GDMPLP-1 17-m
C 581	12.4	0.6	17	1	ADB80967	Rabbit beta-globin	C 654	12.2	0.6	17	1	ABN08406	Human GDMPLP-1 17-m
C 582	12.4	0.6	17	1	ABK01807	Human IDE zinzyme	C 655	12.2	0.6	17	1	ABN02041	Human GDMPLP-1 17-m
C 583	12.4	0.6	18	1	ABK43557	Human IDE zinzyme	C 656	12.2	0.6	17	1	ABK25912	Albino plant produ
C 584	12.2	0.6	17	1	ADA50406	Thermus scotoductu	C 657	12.2	0.6	17	1	ABK25911	Albino plant produ
C 585	12.2	0.6	17	1	ACQ79937	Thermus oshimai nu	C 658	12.2	0.6	17	1	ABK18988	Human HPL scannin
C 586	12.2	0.6	17	1	AAQ11387	Probe COD 931 spec	C 659	12.2	0.6	17	1	ABK17499	Human ERG DNazyme
C 587	12.2	0.6	17	1	AAQ21838	Antisense polyamin	C 660	12.2	0.6	17	1	ABK17499	Human ERG DNazyme
C 588	12.2	0.6	17	1	AAQ57302	Enzymatic RNA mole	C 661	12.2	0.6	17	1	ABK18610	Human ERG G-Cleave
C 589	12.2	0.6	17	1	AAQ62032	Mutant Ki-ras codo	C 662	12.2	0.6	17	1	ABK18625	Human ERG G-Cleave
C 590	12.2	0.6	17	1	AAQ01734	Peptide nucleic ac	C 663	12.2	0.6	17	1	ABK18986	Human ERG DNazyme
C 591	12.2	0.6	17	1	AAQ79851	K-ras modulating s	C 664	12.2	0.6	17	1	ABK18190	Human ERG DNazyme
C 592	12.2	0.6	17	1	AAQ43101	Antisense RA-beta2	C 665	12.2	0.6	17	1	ABK18580	Human ERG G-Cleave
C 593	12.2	0.6	17	1	AAQ12444	Antisense RA-beta2	C 666	12.2	0.6	17	1	ABK18023	Human ERG G-Cleave
C 594	12.2	0.6	17	1	AAQ93618	Antiviral phosphor	C 667	12.2	0.6	17	1	ABD27399	Human tumour necro
C 595	12.2	0.6	17	1	AAQ74663	Primer 4 (reverse)	C 668	12.2	0.6	17	1	ABD27399	Human tumour necro
C 596	12.2	0.6	17	1	AAQ73174	Mouse flk-1 VEGF r	C 669	12.2	0.6	17	1	ABV90456	Human PAPP-Ea asso
C 597	12.2	0.6	17	1	AAQ93446	Mouse flk-1 VEGF r	C 670	12.2	0.6	17	1	ABV90716	Human PAPP-Ea asso
C 598	12.2	0.6	17	1	AAV97640	Probe specific for	C 671	12.2	0.6	17	1	ABV90717	Human PAPP-Ea asso
C 599	12.2	0.6	17	1	AAV29726	Human EGF-R target	C 672	12.2	0.6	17	1	ABV90718	Human PAPP-Ea asso
C 600	12.2	0.6	17	1	AAV29733	Probe used to exam	C 673	12.2	0.6	17	1	ABV90578	Human PAPP-Ea asso
C 601	12.2	0.6	17	1	AAV41404	Nucleotide sequenc	C 674	12.2	0.6	17	1	ABV90110	Human PAPP-Ea asso
C 602	12.2	0.6	17	1	AAV41434	Nucleotide sequenc	C 675	12.2	0.6	17	1	ABV90710	Human PAPP-Ea asso
C 603	12.2	0.6	17	1	AAQ20940	Integrin alpha 6 s	C 676	12.2	0.6	17	1	ABV90713	Human PAPP-Ea asso
C 604	12.2	0.6	17	1	AAQ22863	Integrin subunit b	C 677	12.2	0.6	17	1	ABV90713	Human PAPP-Ea asso
C 605	12.2	0.6	17	1	AAQ17212	Aryl hydrocarbon n	C 678	12.2	0.6	17	1	ABV91244	Human PAPP-Ea asso
C 606	12.2	0.6	17	1	AAQ18977	Human TIE-2 substr	C 679	12.2	0.6	17	1	ABV90714	Human PAPP-Ea asso
C 607	12.2	0.6	17	1	AAQ17180	Human TIE-2 substr	C 680	12.2	0.6	17	1	ABV90712	Human PAPP-Ea asso
C 608	12.2	0.6	17	1	AAQ20389	Aryl hydrocarbon n	C 681	12.2	0.6	17	1	ABK56419	Human PAPP-Ea asso
C 609	12.2	0.6	17	1	AAV84031	Integrin alpha 6 s	C 682	12.2	0.6	17	1	ACC53759	Human PAPP-Ea asso
C 610	12.2	0.6	17	1	AAQ21627	Antisense oligonuc	C 683	12.2	0.6	17	1	ACC53759	Human PAPP-Ea asso
C 611	12.2	0.6	17	1	AAQ21627	Human Ki-ras speci	C 684	12.2	0.6	17	1	ACC53759	Human PAPP-Ea asso
C 612	12.2	0.6	17	1	AAQ56991	Ras gene modulatn	C 685	12.2	0.6	17	1	ABT34365	Human tumour supp
C 613	12.2	0.6	17	1	AAQ52448	Human A-Raf substr	C 686	12.2	0.6	17	1	ABT34365	Human tumour supp
C 614	12.2	0.6	17	1	AAQ93545	Human B-Raf substr	C 687	12.2	0.6	17	1	ABT40203	Tumour suppression
C 615	12.2	0.6	17	1	AAQ14709	Triple helix third	C 688	12.2	0.6	17	1	ACA06570	NFKB sub-unit modu
C 616	12.2	0.6	17	1	AAQ77963	Human tenascin bin	C 689	12.2	0.6	17	1	ADA99560	NFKB sub-unit modu
C 617	12.2	0.6	17	1	AAQ77925	Human tenascin bin	C 690	12.2	0.6	17	1	ADA99560	Human MD23 scannin
							690	12.2	0.6	17	1	ADB00274	Human MD23 scannin
												ADB04343	Human MD27 scannin

C 837	11.8	0.5	15	1	AAV99282	HIV homology regio	910	11.6	0.5	13	1	ABC32187	Oligonucleotide SE
C 838	11.8	0.5	15	1	AA262704	Substrate for HH r	C 911	11.6	0.5	13	1	ABC32186	Oligonucleotide SE
C 839	11.8	0.5	15	1	AA264105	Substrate for HH r	C 912	11.6	0.5	15	1	AA519718	ASO probe #15 to d
C 840	11.8	0.5	15	1	AA262498	Substrate for HH r	C 913	11.6	0.5	18	1	AA37653	PCR primer PFX52U
C 841	11.8	0.5	15	1	AA264020	Substrate for hamr	C 914	11.6	0.5	20	1	AA160009	Human JZ-1 gene am
C 842	11.8	0.5	15	1	AA290883	Human NR8 gene pro	C 915	11.6	0.5	20	1	ABK89166	Human GAF1 PCR pr
C 843	11.8	0.5	15	1	AA290861	Human NR8 gene pro	C 916	11.6	0.5	21	1	AA794017	Primer for TPO/hCG
C 844	11.8	0.5	15	1	AA259282	Human NR8 gene pro	C 917	11.6	0.5	24	1	AAV55817	Multimerisation of
C 845	11.8	0.5	15	1	AA259278	Human NR8 gene pro	C 918	11.6	0.5	24	1	AAV55817	Human 55kDa tumour
C 846	11.8	0.5	15	1	AA290837	Human NR8 gene pro	C 919	11.6	0.5	29	1	AAZ09169	Human 55 KD TNFBP
C 847	11.8	0.5	15	1	AA290836	Human NR8 gene pro	C 920	11.4	0.5	29	1	AAH48858	Neuroblastoma spec
C 848	11.8	0.5	15	1	AA290895	Human NR8 gene pro	C 921	11.4	0.5	13	1	AA515921	Human telomerase p
C 849	11.8	0.5	15	1	AA271517	Neocarcinostatin a	C 922	11.4	0.5	13	1	AAAC0683	Immunogenic CpG ol
C 850	11.8	0.5	15	1	AA264356	C-1027 gene cluste	C 923	11.4	0.5	13	1	ABC25843	Oligonucleotide SE
C 851	11.8	0.5	15	1	AA264639	Primer for a polym	C 924	11.4	0.5	13	1	ABC79822	Oligonucleotide SE
C 852	11.8	0.5	15	1	AAE52635	IGF-I oligonucleot	C 925	11.4	0.5	13	1	ABC05559	Oligonucleotide SE
C 853	11.8	0.5	15	1	AAE50368	IGF-I oligonucleot	C 926	11.4	0.5	13	1	ABC81714	Oligonucleotide SE
C 854	11.8	0.5	15	1	AAE50397	IGF-I oligonucleot	C 927	11.4	0.5	13	1	ABF46128	Oligonucleotide SE
C 855	11.8	0.5	15	1	AAE49377	IGF-I oligonucleot	C 928	11.4	0.5	13	1	ABH07889	Oligonucleotide SE
C 856	11.8	0.5	15	1	AAE46517	IGFBP2 oligonucleo	C 929	11.4	0.5	13	1	ABH14303	Oligonucleotide SE
C 857	11.8	0.5	15	1	AAE46761	IGFBP2 oligonucleo	C 930	11.4	0.5	13	1	ABC46382	Oligonucleotide SE
C 858	11.8	0.5	15	1	AAE49378	IGF-I oligonucleot	C 931	11.4	0.5	13	1	ABC35597	Oligonucleotide SE
C 859	11.8	0.5	15	1	AAE50793	IGF-I oligonucleot	C 932	11.4	0.5	13	1	ABC36045	Oligonucleotide SE
C 860	11.8	0.5	15	1	AAE46786	IGFBP3 oligonucleo	C 933	11.4	0.5	13	1	ABC60876	Oligonucleotide SE
C 861	11.8	0.5	15	1	AAE50569	IGF-I oligonucleot	C 934	11.4	0.5	13	1	ABF32398	Oligonucleotide SE
C 862	11.8	0.5	15	1	AAE50570	IGF-I oligonucleot	C 935	11.4	0.5	13	1	ABF36149	Oligonucleotide SE
C 863	11.8	0.5	15	1	AAE46785	IGFBP3 oligonucleo	C 936	11.4	0.5	13	1	ABF63887	Oligonucleotide SE
C 864	11.8	0.5	15	1	AAE47506	IGFBP3 oligonucleo	C 937	11.4	0.5	13	1	ABF89343	Oligonucleotide SE
C 865	11.8	0.5	15	1	AAE47507	IGFBP3 oligonucleo	C 938	11.4	0.5	13	1	ABH49472	Oligonucleotide SE
C 866	11.8	0.5	15	1	AAE46757	IGFBP3 oligonucleo	C 939	11.4	0.5	13	1	ABH49472	Oligonucleotide SE
C 867	11.8	0.5	15	1	AAE52178	IGF-I oligonucleot	C 940	11.4	0.5	13	1	ABF25379	Oligonucleotide SE
C 868	11.8	0.5	15	1	AAE52178	IGF-I oligonucleot	C 941	11.4	0.5	13	1	ABF33003	Oligonucleotide SE
C 869	11.8	0.5	15	1	AAE70302	Human interleukin-	C 942	11.4	0.5	13	1	ABF46116	Oligonucleotide SE
C 870	11.8	0.5	15	1	AAE69371	Human DRD2 allele	C 943	11.4	0.5	13	1	ABF56566	Oligonucleotide SE
C 871	11.8	0.5	15	1	AAE69301	Human IL4Ralpha ge	C 944	11.4	0.5	13	1	ABC54454	Oligonucleotide SE
C 872	11.8	0.5	15	1	AAE69321	Human IL4Ralpha ge	C 945	11.4	0.5	13	1	ABC79823	Oligonucleotide SE
C 873	11.8	0.5	15	1	AAE44700	Human API-112 pref	C 946	11.4	0.5	13	1	ABF23790	Oligonucleotide SE
C 874	11.8	0.5	15	1	AAE595428	Human bcl-2 antise	C 947	11.4	0.5	13	1	ABF25378	Oligonucleotide SE
C 875	11.8	0.5	15	1	ABZ34231	Human ICAM2 haplot	C 948	11.4	0.5	13	1	ABF5937	Oligonucleotide SE
C 876	11.8	0.5	15	1	ABZ34639	HIV-1 reverse tran	C 949	11.4	0.5	13	1	ABH5264	Oligonucleotide SE
C 877	11.8	0.5	15	1	ABK32144	HIV-1 reverse tran	C 950	11.4	0.5	13	1	ABH15265	Oligonucleotide SE
C 878	11.8	0.5	15	1	ABX01158	Human colon cancer	C 951	11.4	0.5	13	1	ABC25842	Oligonucleotide SE
C 879	11.8	0.5	15	1	ABX00555	Hepatitis C virus	C 952	11.4	0.5	13	1	ABC36044	Oligonucleotide SE
C 880	11.8	0.5	15	1	ABX01073	Hepatitis C virus	C 953	11.4	0.5	13	1	ABC64518	Oligonucleotide SE
C 881	11.8	0.5	15	1	ABX00349	Hepatitis C virus	C 954	11.4	0.5	13	1	ABF5936	Oligonucleotide SE
C 882	11.8	0.5	15	1	ACC47781	Kras nucleotide se	C 955	11.4	0.5	13	1	ABF36148	Oligonucleotide SE
C 883	11.8	0.5	15	1	ABV93739	Bacillus thuringie	C 956	11.4	0.5	13	1	ABF43694	Oligonucleotide SE
C 884	11.8	0.5	15	1	ACC71571	Alzheimer's Disease	C 957	11.4	0.5	13	1	ABF95985	Oligonucleotide SE
C 885	11.8	0.5	15	1	ABX50038	Telomere length an	C 958	11.4	0.5	13	1	ABF56567	Oligonucleotide SE
C 886	11.8	0.5	15	1	ABX50040	Telomere length an	C 959	11.4	0.5	13	1	ABH07888	Oligonucleotide SE
C 887	11.8	0.5	15	1	ADD14900	Kras target oligon	C 960	11.4	0.5	13	1	ABH64846	Oligonucleotide SE
C 888	11.8	0.5	16	1	AAQ70682	Triplex forming ol	C 961	11.4	0.5	13	1	ABC37656	Oligonucleotide SE
C 889	11.8	0.5	16	1	AAQ701926	P. cepacia 16S rRNA	C 962	11.4	0.5	13	1	ABF68290	Oligonucleotide SE
C 890	11.8	0.5	16	1	AAQ701934	P. cepacia 16S rRNA	C 963	11.4	0.5	13	1	ABF46129	Oligonucleotide SE
C 891	11.8	0.5	16	1	AAV08563	Primer ACE/108RB f	C 964	11.4	0.5	13	1	ABH59544	Oligonucleotide SE
C 892	11.8	0.5	16	1	AA983885	PTEN/MMAC1 5'UTR-E	C 965	11.4	0.5	13	1	ABC93462	Oligonucleotide SE
C 893	11.8	0.5	16	1	AA988651	PTEN/MMAC1 DNA PCR	C 966	11.4	0.5	13	1	ABF11606	Oligonucleotide SE
C 894	11.8	0.5	16	1	AA338209	Human angiotensin-	C 967	11.4	0.5	13	1	ABC40096	Oligonucleotide SE
C 895	11.8	0.5	16	1	AAE66972	Human leukocyte an	C 968	11.4	0.5	13	1	ABF16418	Oligonucleotide SE
C 896	11.8	0.5	16	1	AAE66972	Human ACE, AGT and	C 969	11.4	0.5	13	1	ABF32399	Oligonucleotide SE
C 897	11.8	0.5	16	1	AAE66972	Peptide nucleic ac	C 970	11.4	0.5	13	1	ABH59545	Oligonucleotide SE
C 898	11.8	0.5	16	1	AAE66972	N-acetyltransferas	C 971	11.4	0.5	13	1	ABC40097	Oligonucleotide SE
C 899	11.8	0.5	16	1	AAE66972	Rhesus monkey P-cl	C 972	11.4	0.5	13	1	ABF72586	Oligonucleotide SE
C 900	11.8	0.5	16	1	ABX75231	Human 216 gene all	C 973	11.4	0.5	13	1	ABH14302	Oligonucleotide SE
C 901	11.8	0.5	16	1	AD070218	Zoster virus Irf-1	C 974	11.4	0.5	13	1	ABH65694	Oligonucleotide SE
C 902	11.8	0.5	16	1	AD070218	Human KNS1 PCR pr	C 975	11.4	0.5	13	1	ABC20177	Oligonucleotide SE
C 903	11.8	0.5	17	1	AD070218	Tumour suppression	C 976	11.4	0.5	13	1	ABC70938	Oligonucleotide SE
C 904	11.8	0.5	17	1	ABN08363	Human GDMPL-1 17-m	C 977	11.4	0.5	13	1	ABC22060	Oligonucleotide SE
C 905	11.8	0.5	17	1	AD084343	Human MD27 scannin	C 978	11.4	0.5	13	1	ABF11607	Oligonucleotide SE
C 906	11.8	0.5	17	1	ABT35836	Tumour suppression	C 979	11.4	0.5	13	1	ABG64519	Oligonucleotide SE
C 907	11.8	0.5	19	1	AAV10706	Human breast cance	C 980	11.4	0.5	13	1	ABH36193	Oligonucleotide SE
C 908	11.6	0.5	13	1	ABF31853	Oligonucleotide SE	C 981	11.4	0.5	13	1	ABF89342	Oligonucleotide SE
C 909	11.6	0.5	13	1	ABF31852	Oligonucleotide SE	C 982	11.4	0.5	13	1	ABC81715	Oligonucleotide SE

c 983	11.4	0.5	13	1	ABF12076	Oligonucleotide SE	1056	11.4	0.5	15	1	AAT55043	Human rla1 hamster
984	11.4	0.5	13	1	ABF15729	Oligonucleotide SE	1057	11.4	0.5	15	1	AAT51874	Human ICAM hamster
c 985	11.4	0.5	13	1	ABF31356	Oligonucleotide SE	1058	11.4	0.5	15	1	AAT37613	Apo(a) mRNA (nt. p
c 986	11.4	0.5	13	1	ABF33002	Oligonucleotide SE	1059	11.4	0.5	15	1	AAT37615	Apo(a) mRNA (nt. p
c 987	11.4	0.5	13	1	ABF94304	Oligonucleotide SE	1060	11.4	0.5	15	1	AAK64525	Human B7-1 hamster
c 988	11.4	0.5	13	1	ABH07886	Oligonucleotide SE	c1061	11.4	0.5	15	1	AAT35030	Triplex-forming ol
c 989	11.4	0.5	13	1	ABH49473	Oligonucleotide SE	c1062	11.4	0.5	15	1	AAT50145	Rabbit CERP HH rib
c 990	11.4	0.5	13	1	ABC46383	Oligonucleotide SE	c1063	11.4	0.5	15	1	AAW5683	Human flt-1 and KD
c 991	11.4	0.5	13	1	ABC60877	Oligonucleotide SE	1064	11.4	0.5	15	1	AAV43307	PCR primer used to
c 992	11.4	0.5	13	1	ABF12077	Oligonucleotide SE	c1065	11.4	0.5	15	1	AAV48790	rbzB-2 gene anticse
c 993	11.4	0.5	13	1	ABC37657	Oligonucleotide SE	c1066	11.4	0.5	15	1	AAV31787	Transcript tag seq
c 994	11.4	0.5	13	1	ABF15307	Oligonucleotide SE	c1067	11.4	0.5	15	1	AAV34457	Template sequence
c 995	11.4	0.5	13	1	ABF95984	Oligonucleotide SE	1068	11.4	0.5	15	1	AAV26829	Trichosporon aquat
c 996	11.4	0.5	13	1	ABH04059	Oligonucleotide SE	c1069	11.4	0.5	15	1	AAV58317	C. jejuni and C. c
c 997	11.4	0.5	13	1	ABF83676	Oligonucleotide SE	c1070	11.4	0.5	15	1	AAV63414	C-1027 gene Cluste
c 998	11.4	0.5	13	1	ABF31357	Oligonucleotide SE	c1071	11.4	0.5	15	1	AAV73569	Forward primer #12
c 999	11.4	0.5	13	1	ABF36152	Oligonucleotide SE	1072	11.4	0.5	15	1	AAV98848	Poly-G immunostimu
c1000	11.4	0.5	13	1	ABF72587	Oligonucleotide SE	1073	11.4	0.5	15	1	AAV99711	Immunostimulatory
c1001	11.4	0.5	13	1	ABH04058	Oligonucleotide SE	c1074	11.4	0.5	15	1	AAV46483	IGFBP2 oligonucleo
c1002	11.4	0.5	13	1	ABH43592	Oligonucleotide SE	1075	11.4	0.5	15	1	AAV46637	IGFBP2 oligonucleo
c1003	11.4	0.5	13	1	ABH43593	Oligonucleotide SE	c1076	11.4	0.5	15	1	AAV46486	IGFBP2 oligonucleo
c1004	11.4	0.5	13	1	ABC22064	Oligonucleotide SE	1077	11.4	0.5	15	1	AAV49844	IGF-I oligonucleot
c1005	11.4	0.5	13	1	ABC22065	Oligonucleotide SE	c1078	11.4	0.5	15	1	AAV52636	IGF-I oligonucleot
c1006	11.4	0.5	13	1	ABC35596	Oligonucleotide SE	1079	11.4	0.5	15	1	AAV46636	IGFBP3 oligonucleo
c1007	11.4	0.5	13	1	ABF5728	Oligonucleotide SE	1080	11.4	0.5	15	1	AAV49433	IGF-I oligonucleot
c1008	11.4	0.5	13	1	ABF31848	Oligonucleotide SE	1081	11.4	0.5	15	1	AAV49841	IGFBP3 oligonucleo
c1009	11.4	0.5	13	1	ABF46117	Oligonucleotide SE	1082	11.4	0.5	15	1	AAV47940	IGFBP3 oligonucleo
c1010	11.4	0.5	13	1	ABC68985	Oligonucleotide SE	c1083	11.4	0.5	15	1	AAV46601	IGFBP2 oligonucleo
c1011	11.4	0.5	13	1	ABC68986	Oligonucleotide SE	1084	11.4	0.5	15	1	AAV46635	IGFBP3 oligonucleo
c1012	11.4	0.5	13	1	ABC70939	Oligonucleotide SE	1085	11.4	0.5	15	1	AAV49430	IGF-I oligonucleot
c1013	11.4	0.5	13	1	ABF16419	Oligonucleotide SE	c1086	11.4	0.5	15	1	AAV45598	IGFBP2 oligonucleo
c1014	11.4	0.5	13	1	ABF31849	Oligonucleotide SE	1087	11.4	0.5	15	1	AAV52637	IGF-I oligonucleot
c1015	11.4	0.5	13	1	ABF68286	Oligonucleotide SE	c1088	11.4	0.5	15	1	AAV47947	IGFBP3 oligonucleo
c1016	11.4	0.5	13	1	ABF94305	Oligonucleotide SE	c1089	11.4	0.5	15	1	AAV70053	Human TNFRSF11B ge
c1017	11.4	0.5	13	1	ABC68984	Oligonucleotide SE	c1090	11.4	0.5	15	1	AAH27026	Fcgr1 gene GRR top
c1018	11.4	0.5	13	1	ABC22061	Oligonucleotide SE	c1091	11.4	0.5	15	1	AAV67086	C jejuni/ E coli d
c1019	11.4	0.5	13	1	ABC34844	Oligonucleotide SE	c1092	11.4	0.5	15	1	AAV69384	Human IL4Ralpha ge
c1020	11.4	0.5	13	1	ABC4272	Oligonucleotide SE	c1093	11.4	0.5	15	1	AAV73900	Human SLC6A4 allel
c1021	11.4	0.5	13	1	ABF45306	Oligonucleotide SE	c1094	11.4	0.5	15	1	AAV73898	Human SLC6A4 allel
c1022	11.4	0.5	13	1	ABF68287	Oligonucleotide SE	c1095	11.4	0.5	15	1	ABA03629	Human API-112 pref
c1023	11.4	0.5	13	1	ABF68291	Oligonucleotide SE	1096	11.4	0.5	15	1	ABA026675	Human GPR31 gene p
c1024	11.4	0.5	13	1	ABF73358	Oligonucleotide SE	1097	11.4	0.5	15	1	ABK12525	Tetracycline regul
c1025	11.4	0.5	13	1	ABH07887	Oligonucleotide SE	c1098	11.4	0.5	15	1	ABK97512	ASO probe #8 to de
c1026	11.4	0.5	13	1	ABH65695	Oligonucleotide SE	c1099	11.4	0.5	15	1	ABK12525	Human LCAT gene po
c1027	11.4	0.5	13	1	ABC33463	Oligonucleotide SE	1100	11.4	0.5	15	1	ABU52110	Human PER1 allele
c1028	11.4	0.5	13	1	ABC20176	Oligonucleotide SE	1101	11.4	0.5	15	1	ABU52130	Human PER1 allele
c1029	11.4	0.5	13	1	ABC54455	Oligonucleotide SE	c1102	11.4	0.5	15	1	ABK95822	Solute Carrier Fam
c1030	11.4	0.5	13	1	ABC34845	Oligonucleotide SE	c1103	11.4	0.5	15	1	ABU57627	Human SCYA24 ASO p
c1031	11.4	0.5	13	1	ABC64273	Oligonucleotide SE	1104	11.4	0.5	15	1	ABU578432	Angiogenesis inhib
c1032	11.4	0.5	13	1	ABF23791	Oligonucleotide SE	c1105	11.4	0.5	15	1	AAV95367	Human ICAM2 gene a
c1033	11.4	0.5	13	1	ABF36153	Oligonucleotide SE	1106	11.4	0.5	15	1	AAV40384	Bovine DGAT1 gene
c1034	11.4	0.5	13	1	AAQ42800	Oligonucleotide SE	c1107	11.4	0.5	15	1	ABT05338	Human N-acetylglala
c1035	11.4	0.5	13	1	AAQ61996	Pseudonucleotide c	c1108	11.4	0.5	15	1	AAV95599	Apolipoprotein C-I
c1036	11.4	0.5	13	1	ABF73359	Oligonucleotide SE	1109	11.4	0.5	15	1	AAV95599	Human NRP1 gene al
c1037	11.4	0.5	13	1	ABF93677	Oligonucleotide SE	c1110	11.4	0.5	15	1	AAV95599	Human APOA4 allele
c1038	11.4	0.5	13	1	ABH46487	Oligonucleotide SE	c1111	11.4	0.5	15	1	ABK32741	Human APOA4 allele
c1039	11.4	0.5	13	1	AAQ42800	Oligonucleotide SE	c1112	11.4	0.5	15	1	ABX01755	Hepatitis C virus
c1040	11.4	0.5	13	1	AAQ61996	Oligonucleotide SE	c1113	11.4	0.5	15	1	ABX01755	Hepatitis C virus
c1041	11.4	0.5	13	1	AAQ61915	Oligonucleotide SE	c1114	11.4	0.5	15	1	ABT19906	Human FCDH2 ASO PC
c1042	11.4	0.5	13	1	AAQ61899	Oligonucleotide SE	c1115	11.4	0.5	15	1	ABX81303	Human lysosomal ac
c1043	11.4	0.5	13	1	AAQ78453	Oligonucleotide SE	c1116	11.4	0.5	15	1	ABX81774	Human CHRM5 gene p
c1044	11.4	0.5	13	1	AAQ37984	Oligonucleotide SE	c1117	11.4	0.5	15	1	ABX76088	Immunostimulatory
c1045	11.4	0.5	13	1	AAQ67549	Oligonucleotide SE	c1118	11.4	0.5	15	1	ACA58753	Gastric ulcer trea
c1046	11.4	0.5	13	1	AAQ67550	Oligonucleotide SE	c1119	11.4	0.5	15	1	ACA09928	Immunostimulatory
c1047	11.4	0.5	13	1	AAQ67550	Oligonucleotide SE	c1120	11.4	0.5	15	1	ACC71579	Necrosis factor ka
c1048	11.4	0.5	13	1	AAQ67679	Oligonucleotide SE	c1121	11.4	0.5	15	1	ABX89900	Alzheimer's Disease
c1049	11.4	0.5	13	1	AAQ66742	Oligonucleotide SE	c1122	11.4	0.5	15	1	ACA92756	Cancer medicament
c1050	11.4	0.5	13	1	ADBE8047	Oligonucleotide SE	c1123	11.4	0.5	15	1	ACA92756	Immunostimulatory
c1051	11.4	0.5	13	1	ADBE8047	Oligonucleotide SE	c1124	11.4	0.5	15	1	ACH057382	Human 2H9 CD30 ant
c1052	11.4	0.5	13	1	ADBE8047	Oligonucleotide SE	c1125	11.4	0.5	15	1	ACH057382	Immunostimulatory
c1053	11.4	0.5	13	1	AAV65725	Oligonucleotide SE	c1126	11.4	0.5	15	1	ACF05803	PCR primer to AG34
c1054	11.4	0.5	13	1	AAZ65471	Oligonucleotide SE	c1127	11.4	0.5	15	1	AAI60774	Human HNF-1 alpha
c1055	11.4	0.5	13	1	AAQ42796	Pseudonucleotide c	c1128	11.4	0.5	15	1	ABD37213	Immunostimulatory
												AAV57216	Human CHRN2 allele

1129	11.4	0.5	15	1	AAF52691	IGF-I oligonucleot	c1202	11	0.5	11	1	ABV69560	Human skin EST 734
c1130	11.4	0.5	16	1	AAQ42798	Pseudonucleotide c	c1203	11	0.5	11	1	ABV63136	Human skin EST 922
1131	11.4	0.5	16	1	AAQ72441	Ligase Chain React	1204	11	0.5	11	1	ABV68292	Human skin EST 607
c1132	11.4	0.5	16	1	AAT64483	Human haemopoietin	1205	11	0.5	12	1	AAV72000	Oligo used for con
c1133	11.4	0.5	16	1	AAT64472	Human haemopoietin	1206	11	0.5	12	1	AAO06763	VEGF derived short
1134	11.4	0.5	16	1	AAV11898	L. lactis NS3 locu	1207	11	0.5	12	1	AAO04023	5' end of coding r
1135	11.4	0.5	16	1	AAV56201	Human alpha-7 nico	c1208	11	0.5	12	1	A2A46047	Synthetic oligonuc
c1136	11.4	0.5	16	1	AA86561	PCNA hairpin riboz	c1209	11	0.5	12	1	AB127667	Oligonucleotide pr
c1137	11.4	0.5	16	1	AAH61727	PCNA hairpin/hamme	1210	11	0.5	12	1	ABH91814	Oligonucleotide pr
c1138	11.4	0.5	16	1	AAH88161	Human thyroid malf	1211	11	0.5	12	1	AB145561	Oligonucleotide pr
1139	11.4	0.5	16	1	ABT33712	Ribozyme substrate	c1212	11	0.5	12	1	ABH75494	Oligonucleotide pr
c1140	11.4	0.5	16	1	ABT33711	Ribozyme substrate	1213	11	0.5	12	1	ABH08662	Oligonucleotide pr
c1141	11.4	0.5	16	1	ADE14063	Optineurin promote	c1214	11	0.5	12	1	ABH91084	Oligonucleotide pr
c1142	11.4	0.5	16	1	ADE14267	Optineurin promote	1215	11	0.5	12	1	ABH53248	Oligonucleotide pr
1143	11.4	0.5	17	1	ABK02378	Human NOGO Amberzy	c1216	11	0.5	12	1	ABH76801	Oligonucleotide pr
c1144	11.4	0.5	20	1	ABV58392	Human PDE7a3 splic	c1217	11	0.5	12	1	AB117147	Oligonucleotide pr
1145	11.4	0.5	28	1	AAV061712	Antisense PCR prim	1218	11	0.5	12	1	ABH80412	Oligonucleotide pr
c1146	11.2	0.5	16	1	AAV08583	Primer ACE/108RB f	1219	11	0.5	12	1	AB120963	Oligonucleotide pr
c1147	11.2	0.5	16	1	AA338209	Human angiotensin-	1220	11	0.5	12	1	ABH71304	Oligonucleotide pr
c1148	11.2	0.5	16	1	AA361209	Human ACE, AGT and	c1221	11	0.5	12	1	AB148732	Oligonucleotide pr
1149	11.2	0.5	16	1	AAQ24931	Homeo box consensu	1222	11	0.5	12	1	AB172529	Oligonucleotide pr
c1150	11.2	0.5	16	1	AAQ24931	Homeo box consensu	c1223	11	0.5	12	1	AB161761	Oligonucleotide pr
1151	11.2	0.5	16	1	AAQ30514	Immunoglobulin gen	1224	11	0.5	12	1	AB163498	Oligonucleotide pr
c1152	11.2	0.5	16	1	AAQ21918	TEG-terminatd exo	c1225	11	0.5	12	1	ABH93417	Oligonucleotide pr
1153	11.2	0.5	16	1	AAQ92129	p53 detection prob	1226	11	0.5	12	1	ABH97627	Oligonucleotide pr
c1154	11.2	0.5	16	1	AA222506	Streptomyces sp. o	c1227	11	0.5	12	1	AB151405	Oligonucleotide pr
1155	11.2	0.5	16	1	AAT38471	Ancyllostoma secret	1228	11	0.5	12	1	AB167672	Oligonucleotide pr
c1156	11.2	0.5	16	1	AAT37119	Oligonucleotide co	c1229	11	0.5	12	1	AB171629	Oligonucleotide pr
c1157	11.2	0.5	16	1	AAV14113	Probe HBPr9 for pr	c1230	11	0.5	12	1	AB126765	Oligonucleotide pr
1158	11.2	0.5	16	1	AAV49052	rb gene antisense	1231	11	0.5	12	1	AB144106	Oligonucleotide pr
c1159	11.2	0.5	16	1	AA040899	Tenascin-C phospho	c1232	11	0.5	12	1	AB148568	Oligonucleotide pr
1160	11.2	0.5	16	1	AA259366	Reverse PCR primer	c1233	11	0.5	12	1	ABH98002	Oligonucleotide pr
1161	11.2	0.5	16	1	AA440694	Human CD36 polymor	1234	11	0.5	12	1	AB175143	Oligonucleotide pr
1162	11.2	0.5	16	1	AA290068	Oligonucleotide #2	1235	11	0.5	12	1	AB180295	Oligonucleotide pr
1163	11.2	0.5	16	1	AA263783	Human TNFalpha gen	1236	11	0.5	12	1	AB157944	Oligonucleotide pr
c1164	11.2	0.5	16	1	AAH22297	Cathepsin B revers	c1237	11	0.5	12	1	AB160879	Oligonucleotide pr
c1165	11.2	0.5	16	1	AA556862	Validation ribozym	c1238	11	0.5	12	1	AB102629	Oligonucleotide pr
1166	11.2	0.5	16	1	AA164977	Human Creml prote	1239	11	0.5	12	1	AB106321	Oligonucleotide pr
1167	11.2	0.5	16	1	ABK33881	Gag/pol expression	c1240	11	0.5	12	1	AB114479	Oligonucleotide pr
c1168	11.2	0.5	16	1	ABK49297	Norwalk-like virus	c1241	11	0.5	12	1	ABH74944	Oligonucleotide pr
1169	11.2	0.5	16	1	ABL42982	Human chromosome 1	1242	11	0.5	12	1	AB145550	Oligonucleotide pr
1170	11.2	0.5	16	1	ABL44648	Human chromosome 1	1243	11	0.5	12	1	AB179229	Oligonucleotide pr
1171	11.2	0.5	16	1	ABD33335	Proliferation pote	1244	11	0.5	12	1	AB120399	Oligonucleotide pr
c1172	11.2	0.5	16	1	ABL94677	Human VR1 antisens	c1245	11	0.5	12	1	AB129214	Oligonucleotide pr
1173	11.2	0.5	16	1	AAU47118	Pyrin domain conta	c1246	11	0.5	12	1	AB107454	Oligonucleotide pr
c1174	11.2	0.5	16	1	ABT13524	Liver regeneration	c1247	11	0.5	12	1	AB131075	Oligonucleotide pr
c1175	11.2	0.5	16	1	ABT13552	Liver regeneration	1248	11	0.5	12	1	AB108661	Oligonucleotide pr
1176	11.2	0.5	16	1	ADD07159	HSV-1 (17+) IRF-1	1249	11	0.5	12	1	AB129724	Oligonucleotide pr
c1177	11.2	0.5	17	1	ABK01806	Human NOGO Zinzyme	c1250	11	0.5	12	1	AB154550	Oligonucleotide pr
1178	11.2	0.5	17	1	ABD30434	Human MDZ7 scannin	c1251	11	0.5	12	1	AA318638	PCR primer (d33g3)
c1179	11.2	0.5	17	1	AB260690	Human K-Ras DNazym	c1252	11	0.5	13	1	ABC23644	Oligonucleotide SE
1180	11.2	0.5	17	1	ACA08321	Necrosis factor ka	1253	11	0.5	13	1	ABF16913	Oligonucleotide SE
c1181	11.2	0.5	17	1	ABT34365	Tumour suppression	1254	11	0.5	13	1	ABF24106	Oligonucleotide SE
c1182	11.2	0.5	17	1	ABZ62152	Human H-Ras DNazym	c1255	11	0.5	13	1	ABF24107	Oligonucleotide SE
1183	11.2	0.5	18	1	AAZ48540	Human TNFR1 mRNA 1	1256	11	0.5	13	1	ABF26373	Oligonucleotide SE
c1184	11.2	0.5	18	1	ABT05081	TNFR1 expression m	c1257	11	0.5	13	1	ABH19490	Oligonucleotide SE
1185	11.2	0.5	18	1	ABT05082	TNFR1 expression m	1258	11	0.5	13	1	ABF96108	Oligonucleotide SE
1186	11.2	0.5	18	1	ABT05036	TNFR1 expression m	c1259	11	0.5	13	1	ABF96109	Oligonucleotide SE
c1187	11.2	0.5	18	1	AA241037	Cellular inhibitor	1260	11	0.5	13	1	ABH27699	Oligonucleotide SE
1188	11.2	0.5	18	1	AA222131	Human c-IAP-2 mRNA	1261	11	0.5	13	1	ABF78022	Oligonucleotide SE
c1189	11.2	0.5	18	1	AAU60507	Human c-IAP-2 anti	1262	11	0.5	13	1	ABC73245	Oligonucleotide SE
1190	11.2	0.5	19	1	AAH85941	Cdc 25 hs ribozyme	1263	11	0.5	13	1	ABC11715	Oligonucleotide SE
1191	11.2	0.5	19	1	AAH61103	Cdc25 hs ribozyme	1264	11	0.5	13	1	ABF16442	Oligonucleotide SE
1192	11.2	0.5	20	1	ABN86953	Human NOV7 forward	c1265	11	0.5	13	1	ABF71907	Oligonucleotide SE
c1193	11.2	0.5	20	1	AA219995	Human uncoupling p	1266	11	0.5	13	1	ABF97143	Oligonucleotide SE
1194	11.2	0.5	21	1	AAU49614	Tumour differentia	c1267	11	0.5	13	1	ABH31071	Oligonucleotide SE
c1195	11.2	0.5	24	1	AAV55819	Multimerisation of	1268	11	0.5	13	1	ABF84806	Oligonucleotide SE
1196	11.2	0.5	24	1	AAT39967	Minimal motif codi	1269	11	0.5	13	1	ABF60965	Oligonucleotide SE
c1197	11	0.5	11	1	ABQ87547	Human skin stress/	1270	11	0.5	13	1	ABF90460	Oligonucleotide SE
c1198	11	0.5	11	1	ABV62854	Human skin EST 640	1271	11	0.5	13	1	ABH16022	Oligonucleotide SE
c1199	11	0.5	11	1	ABV70557	Human skin EST 834	1272	11	0.5	13	1	ABC46709	Oligonucleotide SE
1200	11	0.5	11	1	ABV64863	Human skin EST 264	c1273	11	0.5	13	1	ABC74713	Oligonucleotide SE
c1201	11	0.5	11	1	ABV70275	Human skin EST 806	c1274	11	0.5	13	1	ABC14797	Oligonucleotide SE

1275	11	0.5	13	1	ABF86800	oligonucleotide SE	1348	11	0.5	13	1	ABF00871	oligonucleotide SE
1276	11	0.5	13	1	ABH12113	oligonucleotide SE	1349	11	0.5	13	1	ABF02653	oligonucleotide SE
1277	11	0.5	13	1	ABC72593	oligonucleotide SE	1350	11	0.5	13	1	ABC52788	oligonucleotide SE
1278	11	0.5	13	1	ABF02652	oligonucleotide SE	ci351	11	0.5	13	1	ABC82812	oligonucleotide SE
1279	11	0.5	13	1	ABC62370	oligonucleotide SE	1352	11	0.5	13	1	ABF10333	oligonucleotide SE
1280	11	0.5	13	1	ABC14796	oligonucleotide SE	ci353	11	0.5	13	1	ABC11714	oligonucleotide SE
1281	11	0.5	13	1	ABC91351	oligonucleotide SE	ci354	11	0.5	13	1	ABC93441	oligonucleotide SE
1282	11	0.5	13	1	ABC66996	oligonucleotide SE	1355	11	0.5	13	1	ABC98399	oligonucleotide SE
1283	11	0.5	13	1	ABH19491	oligonucleotide SE	1356	11	0.5	13	1	ABC50569	oligonucleotide SE
1284	11	0.5	13	1	ABF84807	oligonucleotide SE	1357	11	0.5	13	1	ABC81717	oligonucleotide SE
1285	11	0.5	13	1	ABC72133	oligonucleotide SE	ci358	11	0.5	13	1	ABF16443	oligonucleotide SE
1286	11	0.5	13	1	ABF10332	oligonucleotide SE	1359	11	0.5	13	1	ABF27287	oligonucleotide SE
1287	11	0.5	13	1	ABC39943	oligonucleotide SE	1360	11	0.5	13	1	ABH19228	oligonucleotide SE
1288	11	0.5	13	1	ABF17947	oligonucleotide SE	1361	11	0.5	13	1	ABH34843	oligonucleotide SE
1289	11	0.5	13	1	ABF26372	oligonucleotide SE	ci362	11	0.5	13	1	ABF60964	oligonucleotide SE
1290	11	0.5	13	1	ABF71906	oligonucleotide SE	ci363	11	0.5	13	1	ABH57382	oligonucleotide SE
1291	11	0.5	13	1	ABF73362	oligonucleotide SE	1364	11	0.5	13	1	ABH63487	oligonucleotide SE
1292	11	0.5	13	1	ABF73363	oligonucleotide SE	ci365	11	0.5	13	1	ABC42501	oligonucleotide SE
1293	11	0.5	13	1	ABH34842	oligonucleotide SE	ci366	11	0.5	13	1	ABC46708	oligonucleotide SE
1294	11	0.5	13	1	ABH57383	oligonucleotide SE	ci367	11	0.5	13	1	ABC72132	oligonucleotide SE
1295	11	0.5	13	1	ABF02654	oligonucleotide SE	ci368	11	0.5	13	1	ABC98398	oligonucleotide SE
1296	11	0.5	13	1	ABF16912	oligonucleotide SE	1369	11	0.5	13	1	ABC99912	oligonucleotide SE
1297	11	0.5	13	1	ABF27286	oligonucleotide SE	ci370	11	0.5	13	1	ABC81716	oligonucleotide SE
1298	11	0.5	13	1	ABF95533	oligonucleotide SE	1371	11	0.5	13	1	ABC82813	oligonucleotide SE
1299	11	0.5	13	1	ABH25888	oligonucleotide SE	1372	11	0.5	13	1	ABC99913	oligonucleotide SE
1300	11	0.5	13	1	ABF77164	oligonucleotide SE	1373	11	0.5	13	1	ABF48208	oligonucleotide SE
1301	11	0.5	13	1	ABH47707	oligonucleotide SE	ci374	11	0.5	13	1	ABH51372	oligonucleotide SE
1302	11	0.5	13	1	ABC23645	oligonucleotide SE	1375	11	0.5	13	1	ABH51373	oligonucleotide SE
1303	11	0.5	13	1	ABC62371	oligonucleotide SE	1376	11	0.5	13	1	ABH52440	oligonucleotide SE
1304	11	0.5	13	1	ABF95512	oligonucleotide SE	ci377	11	0.5	13	1	ABH53733	oligonucleotide SE
1305	11	0.5	13	1	ABF53322	oligonucleotide SE	ci378	11	0.5	13	1	ABC52789	oligonucleotide SE
1306	11	0.5	13	1	ABH29779	oligonucleotide SE	1379	11	0.5	13	1	ABC59913	oligonucleotide SE
1307	11	0.5	13	1	ABF90042	oligonucleotide SE	1380	11	0.5	13	1	ABC34841	oligonucleotide SE
1308	11	0.5	13	1	ABC42500	oligonucleotide SE	ci381	11	0.5	13	1	ABC61674	oligonucleotide SE
1309	11	0.5	13	1	ABC93440	oligonucleotide SE	ci382	11	0.5	13	1	ABF36011	oligonucleotide SE
1310	11	0.5	13	1	ABC73244	oligonucleotide SE	1383	11	0.5	13	1	ABF50809	oligonucleotide SE
1311	11	0.5	13	1	ABC50568	oligonucleotide SE	ci384	11	0.5	13	1	ABF78023	oligonucleotide SE
1312	11	0.5	13	1	ABC58758	oligonucleotide SE	ci385	11	0.5	13	1	ABF53323	oligonucleotide SE
1313	11	0.5	13	1	ABC39942	oligonucleotide SE	ci386	11	0.5	13	1	ABH30726	oligonucleotide SE
1314	11	0.5	13	1	ABC91350	oligonucleotide SE	1387	11	0.5	13	1	ABH31070	oligonucleotide SE
1315	11	0.5	13	1	ABF17946	oligonucleotide SE	ci388	11	0.5	13	1	ABF68801	oligonucleotide SE
1316	11	0.5	13	1	ABF18296	oligonucleotide SE	ci389	11	0.5	13	1	ABH16023	oligonucleotide SE
1317	11	0.5	13	1	ABF18297	oligonucleotide SE	1390	11	0.5	13	1	ACD66270	oligonucleotide SE
1318	11	0.5	13	1	ABF36010	oligonucleotide SE	1391	11	0.5	14	1	AAQ61505	oligonucleotide SE
1319	11	0.5	13	1	ABF77165	oligonucleotide SE	1392	11	0.5	14	1	AAV45359	oligonucleotide SE
1320	11	0.5	13	1	ABH29778	oligonucleotide SE	1393	11	0.5	14	1	AAV67069	oligonucleotide SE
1321	11	0.5	13	1	ABH05778	oligonucleotide SE	1394	11	0.5	14	1	AA513213	oligonucleotide SE
1322	11	0.5	13	1	ABH63486	oligonucleotide SE	ci395	11	0.5	14	1	AA95191	oligonucleotide SE
1323	11	0.5	13	1	ABC58759	oligonucleotide SE	ci396	11	0.5	14	1	ABK15310	oligonucleotide SE
1324	11	0.5	13	1	ABC34840	oligonucleotide SE	ci397	11	0.5	15	1	AAQ50075	oligonucleotide SE
1325	11	0.5	13	1	ABC61675	oligonucleotide SE	ci398	11	0.5	15	1	AAQ01717	oligonucleotide SE
1326	11	0.5	13	1	ABC62653	oligonucleotide SE	ci399	11	0.5	15	1	AA54284	oligonucleotide SE
1327	11	0.5	13	1	ABC90469	oligonucleotide SE	ci400	11	0.5	15	1	AA500030	oligonucleotide SE
1328	11	0.5	13	1	ABH25889	oligonucleotide SE	ci401	11	0.5	15	1	AAV53790	oligonucleotide SE
1329	11	0.5	13	1	ABH27698	oligonucleotide SE	ci402	11	0.5	15	1	AAV37746	oligonucleotide SE
1330	11	0.5	13	1	ABH30727	oligonucleotide SE	ci403	11	0.5	15	1	AAAT37748	oligonucleotide SE
1331	11	0.5	13	1	ABH12112	oligonucleotide SE	ci404	11	0.5	15	1	AAAT37750	oligonucleotide SE
1332	11	0.5	13	1	ABH2441	oligonucleotide SE	ci405	11	0.5	15	1	AAV30161	oligonucleotide SE
1333	11	0.5	13	1	ABC72592	oligonucleotide SE	ci406	11	0.5	15	1	AAV53790	oligonucleotide SE
1334	11	0.5	13	1	ABH19229	oligonucleotide SE	1407	11	0.5	15	1	AAV55081	oligonucleotide SE
1335	11	0.5	13	1	ABH05779	oligonucleotide SE	1408	11	0.5	15	1	AAA34528	oligonucleotide SE
1336	11	0.5	13	1	ABF02655	oligonucleotide SE	1409	11	0.5	15	1	AAZ64219	oligonucleotide SE
1337	11	0.5	13	1	ABC90468	oligonucleotide SE	1410	11	0.5	15	1	AAZ20650	oligonucleotide SE
1338	11	0.5	13	1	ABC66997	oligonucleotide SE	1411	11	0.5	15	1	AA300030	oligonucleotide SE
1339	11	0.5	13	1	ABF48209	oligonucleotide SE	1412	11	0.5	15	1	AA502944	oligonucleotide SE
1340	11	0.5	13	1	ABF90043	oligonucleotide SE	ci413	11	0.5	15	1	AA515932	oligonucleotide SE
1341	11	0.5	13	1	ABH3732	oligonucleotide SE	1414	11	0.5	15	1	AA660696	oligonucleotide SE
1342	11	0.5	13	1	ABC74712	oligonucleotide SE	1415	11	0.5	15	1	AA648823	oligonucleotide SE
1343	11	0.5	13	1	ABC62652	oligonucleotide SE	1416	11	0.5	15	1	AA645214	oligonucleotide SE
1344	11	0.5	13	1	ABF50808	oligonucleotide SE	1417	11	0.5	15	1	AA648826	oligonucleotide SE
1345	11	0.5	13	1	ABH47706	oligonucleotide SE	ci418	11	0.5	15	1	AA646482	oligonucleotide SE
1346	11	0.5	13	1	ABF00870	oligonucleotide SE	1419	11	0.5	15	1	AA648242	oligonucleotide SE
1347	11	0.5	13	1			ci420	11	0.5	15	1	AA645602	oligonucleotide SE

c1567	10.8	0.5	15	1	AAV37811	K-ras mutant DNA c	1640	10.8	0.5	15	1	AAF49421	IGF-I oligonucleot
1568	10.8	0.5	15	1	AAV33235	Wild-type probe us	1641	10.8	0.5	15	1	AAF53514	IGF-I oligonucleot
c1569	10.8	0.5	15	1	AAV32235	Wild-type probe us	c1642	10.8	0.5	15	1	AAF53514	IGF-I oligonucleot
1570	10.8	0.5	15	1	AAV60195	Target DNA for pyr	1643	10.8	0.5	15	1	AAF53515	IGF-I oligonucleot
1571	10.8	0.5	15	1	AAV31759	Transcript tag seq	c1644	10.8	0.5	15	1	AAF46758	IGFBP3 oligonucleo
1572	10.8	0.5	15	1	AAV31560	Tag sequence of a	1645	10.8	0.5	15	1	AAF47508	IGFBP3 oligonucleo
1573	10.8	0.5	15	1	AAV31073	Tag sequence of a	c1646	10.8	0.5	15	1	AAF47625	IGFBP3 oligonucleo
1574	10.8	0.5	15	1	AAV31797	Transcript tag seq	c1647	10.8	0.5	15	1	AAF50111	IGF-I oligonucleot
1575	10.8	0.5	15	1	AAV31169	Tag sequence of a	1648	10.8	0.5	15	1	AAF46787	IGFBP3 oligonucleo
c1576	10.8	0.5	15	1	AAV31025	Tag sequence of a	1649	10.8	0.5	15	1	AAF47505	IGFBP3 oligonucleo
1577	10.8	0.5	15	1	AAV31491	Tag sequence of a	c1650	10.8	0.5	15	1	AAF50792	IGF-I oligonucleot
1578	10.8	0.5	15	1	AAV27396	Peptide nucleic ac	c1651	10.8	0.5	15	1	AAF46391	IGFBP2 oligonucleo
c1579	10.8	0.5	15	1	AAV27396	Peptide nucleic ac	c1652	10.8	0.5	15	1	AAF46756	IGFBP3 oligonucleo
1580	10.8	0.5	15	1	AAV27387	Peptide nucleic ac	1653	10.8	0.5	15	1	AAF49376	IGF-I oligonucleot
c1581	10.8	0.5	15	1	AAV27387	Peptide nucleic ac	c1654	10.8	0.5	15	1	AAF53878	IGF-I oligonucleot
1582	10.8	0.5	15	1	AAV27395	Peptide nucleic ac	c1655	10.8	0.5	15	1	AAF46489	IGFBP2 oligonucleo
c1583	10.8	0.5	15	1	AAV27395	Peptide nucleic ac	c1656	10.8	0.5	15	1	AAF50110	IGF-I oligonucleot
1584	10.8	0.5	15	1	AAV93860	Target sequence w	1657	10.8	0.5	15	1	AAF50901	IGF-I oligonucleot
1585	10.8	0.5	15	1	AAV82055	DNA probe sequence	c1658	10.8	0.5	15	1	AAF52179	IGF-I oligonucleot
c1586	10.8	0.5	15	1	AAV82055	DNA probe sequence	c1659	10.8	0.5	15	1	AAF52634	IGF-I oligonucleot
1587	10.8	0.5	15	1	AAV92431	Rhizoctonia sp. PC	c1660	10.8	0.5	15	1	AAF53239	IGF-I oligonucleot
c1588	10.8	0.5	15	1	AAV64021	Substrate for ham	c1661	10.8	0.5	15	1	AAF45495	IGFBP2 oligonucleo
1589	10.8	0.5	15	1	AAV63941	Substrate for ham	1662	10.8	0.5	15	1	AAF46762	IGFBP3 oligonucleo
1590	10.8	0.5	15	1	AAV64114	Substrate for ham	1663	10.8	0.5	15	1	AAF47078	IGFBP3 oligonucleo
c1591	10.8	0.5	15	1	AAV64114	Substrate for ham	1664	10.8	0.5	15	1	AAF52692	IGF-I oligonucleot
c1592	10.8	0.5	15	1	AAV63818	Substrate for ham	c1665	10.8	0.5	15	1	AAF53240	IGF-I oligonucleot
c1593	10.8	0.5	15	1	AAV26752	Substrate for HH r	c1666	10.8	0.5	15	1	AAF53877	IGF-I oligonucleot
1594	10.8	0.5	15	1	AAV62667	Substrate for HH r	1667	10.8	0.5	15	1	AAF45496	IGFBP2 oligonucleo
c1595	10.8	0.5	15	1	AAV90881	Human NR8 gene pro	1668	10.8	0.5	15	1	AAF50571	IGF-I oligonucleot
c1596	10.8	0.5	15	1	AAV90881	Human NR8 gene pro	1669	10.8	0.5	15	1	AAF49420	IGF-I oligonucleot
c1597	10.8	0.5	15	1	AAV90841	Human NR8 gene pro	1670	10.8	0.5	15	1	AAF47832	IGFBP3 oligonucleo
1598	10.8	0.5	15	1	AAV90913	Human NR8 gene pro	1671	10.8	0.5	15	1	AAF50900	IGF-I oligonucleot
c1599	10.8	0.5	15	1	AAV90913	Human NR8 gene pro	c1672	10.8	0.5	15	1	AAF53972	IGF-I oligonucleot
1600	10.8	0.5	15	1	AAA49150	Potential polypuri	c1673	10.8	0.5	15	1	AAF52960	IGF-I oligonucleot
1601	10.8	0.5	15	1	AAV29019	Peptide-nucleic ac	c1674	10.8	0.5	15	1	AAV70011	Human TNFRSF11B ge
c1602	10.8	0.5	15	1	AAV29019	Peptide-nucleic ac	1675	10.8	0.5	15	1	AAV70047	Human TNFRSF11B ge
c1603	10.8	0.5	15	1	AAV33251	N-acetyltransferas	1676	10.8	0.5	15	1	AAV70049	Human TNFRSF11B ge
1604	10.8	0.5	15	1	AAA59902	Murine Op-1 Wt-1/E	1677	10.8	0.5	15	1	AAV70019	Human TNFRSF11B ge
c1605	10.8	0.5	15	1	AAA66946	Human leukocyte an	c1678	10.8	0.5	15	1	AAV28531	Human interleukin-
1606	10.8	0.5	15	1	AAV87040	Probe to AluI huma	c1679	10.8	0.5	15	1	AAH46690	Target virus detec
c1607	10.8	0.5	15	1	AAV68357	Human IRR oligonu	1680	10.8	0.5	15	1	ABX03949	EBV DNA fragment.
c1608	10.8	0.5	15	1	AAV57573	Nucleic acid probe	1681	10.8	0.5	15	1	AAH91789	Human inflammatory
c1609	10.8	0.5	15	1	AAV2650	Cystic fibrosis ge	1682	10.8	0.5	15	1	AAF59241	M13mp18 nucleotide
1610	10.8	0.5	15	1	AAH18942	UCP3 polymorphism	c1683	10.8	0.5	15	1	AAF70325	Human DRD2 allele
c1611	10.8	0.5	15	1	AAV02957	Human CHM1 allele	1684	10.8	0.5	15	1	AAF69454	Human IL4Ralpha ge
c1612	10.8	0.5	15	1	AAV91167	Beta tubulin mutat	c1685	10.8	0.5	15	1	AAF73891	Human SL6A4 allele
1613	10.8	0.5	15	1	AAV24389	Human IL1B gene po	1686	10.8	0.5	15	1	AAF73913	Human SL6A4 allele
1614	10.8	0.5	15	1	AAV05869	Human cholinergic	1687	10.8	0.5	15	1	ABL61024	N. clavipes spidro
1615	10.8	0.5	15	1	AAV04304	Human DAXX DNA all	c1688	10.8	0.5	15	1	ABK97317	#323 5S-C PCR prim
c1616	10.8	0.5	15	1	AAV04330	Human DAXX DNA all	1689	10.8	0.5	15	1	ABK97489	Human LCAT gene po
c1617	10.8	0.5	15	1	AAF46516	IGFBP2 oligonucleo	1690	10.8	0.5	15	1	ABL59300	ASO probe for plat
1618	10.8	0.5	15	1	AAF46518	IGFBP2 oligonucleo	1691	10.8	0.5	15	1	ABA98716	PNA FRET probe #5.
c1619	10.8	0.5	15	1	AAF46518	IGFBP2 oligonucleo	c1692	10.8	0.5	15	1	ABA98716	PNA FRET probe #5.
c1620	10.8	0.5	15	1	AAF46760	IGFBP3 oligonucleo	c1693	10.8	0.5	15	1	ABA97658	Probe z. Unidenti
1621	10.8	0.5	15	1	AAF39624	IGF-I oligonucleot	1694	10.8	0.5	15	1	ABT06035	Human ACTR2 gene p
c1622	10.8	0.5	15	1	AAF53970	IGF-I oligonucleot	1695	10.8	0.5	15	1	ABT06035	Human Igm heavy ch
c1623	10.8	0.5	15	1	AAF46488	IGFBP2 oligonucleo	1696	10.8	0.5	15	1	AAH41859	Target DNA #2 used
1624	10.8	0.5	15	1	AAF47175	IGFBP3 oligonucleo	c1697	10.8	0.5	15	1	AAH41883	ON-25 oligonucleot
c1625	10.8	0.5	15	1	AAF50794	IGF-I oligonucleot	1698	10.8	0.5	15	1	AAH41902	Target RNA used in
1626	10.8	0.5	15	1	AAF45866	IGFBP2 oligonucleo	c1699	10.8	0.5	15	1	AAH41861	ON-6 oligonucleoti
c1627	10.8	0.5	15	1	AAF46392	IGFBP2 oligonucleo	c1700	10.8	0.5	15	1	AAH41884	ON-26 oligonucleot
1628	10.8	0.5	15	1	AAF46784	IGFBP3 oligonucleo	c1701	10.8	0.5	15	1	AAH41855	ON-2 oligonucleoti
1629	10.8	0.5	15	1	AAF47174	IGFBP3 oligonucleo	c1702	10.8	0.5	15	1	AAH41858	ON-4 oligonucleoti
1630	10.8	0.5	15	1	AAF50567	IGF-I oligonucleot	c1703	10.8	0.5	15	1	AAH41897	ON-36 oligonucleot
1631	10.8	0.5	15	1	AAF53963	IGF-I oligonucleot	c1704	10.8	0.5	15	1	AAH41881	ON-23 oligonucleot
1632	10.8	0.5	15	1	AAF45867	IGFBP2 oligonucleo	c1705	10.8	0.5	15	1	AAH41866	ON-10 oligonucleot
1633	10.8	0.5	15	1	AAF47833	IGFBP3 oligonucleo	c1706	10.8	0.5	15	1	AAH41900	ON-39 oligonucleot
1634	10.8	0.5	15	1	AAF49379	IGF-I oligonucleot	c1707	10.8	0.5	15	1	AAH41856	ON-3 oligonucleoti
1635	10.8	0.5	15	1	AAF47077	IGFBP3 oligonucleo	c1708	10.8	0.5	15	1	AAH41862	ON-7 oligonucleoti
c1636	10.8	0.5	15	1	AAF49115	IGF-I oligonucleot	c1709	10.8	0.5	15	1	AAH41882	ON-24 oligonucleoti
1637	10.8	0.5	15	1	AAF52177	IGF-I oligonucleot	c1710	10.8	0.5	15	1	AAH41854	ON-1 oligonucleoti
c1638	10.8	0.5	15	1	AAF52959	IGF-I oligonucleot	c1711	10.8	0.5	15	1	AAH41860	ON-5 oligonucleoti
c1639	10.8	0.5	15	1	AAF49116	IGF-I oligonucleot	1712	10.8	0.5	15	1	AAH41865	Target DNA #3 used

1713 10.8 0.5 15 1 ABZ34638 HIV-1 reverse tran
 1714 10.8 0.5 15 1 ABZ34221 HIV-1 reverse tran
 1715 10.8 0.5 15 1 ABK32514 Human pancreatic c
 1716 10.8 0.5 15 1 ABK31978 Human colon cancer
 1717 10.8 0.5 15 1 ABK32713 Human colorectal a
 1718 10.8 0.5 15 1 ABK32751 Human colorectal a
 1719 10.8 0.5 15 1 ABK32026 Human colon cancer
 1720 10.8 0.5 15 1 ABK32122 Human colon cancer
 1721 10.8 0.5 15 1 ABK32445 Human colon cancer
 1722 10.8 0.5 15 1 ABK32445 Human colon cancer
 1723 10.8 0.5 15 1 ABK32445 Human colon cancer
 1724 10.8 0.5 15 1 ABK32445 Human colon cancer
 1725 10.8 0.5 15 1 ABK32445 Human colon cancer
 1726 10.8 0.5 15 1 ABK32445 Human colon cancer
 1727 10.8 0.5 15 1 ABK32445 Human colon cancer
 1728 10.8 0.5 15 1 ABK32445 Human colon cancer
 1729 10.8 0.5 15 1 ABK32445 Human colon cancer
 1730 10.8 0.5 15 1 ABK32445 Human colon cancer
 1731 10.8 0.5 15 1 ABK32445 Human colon cancer
 1732 10.8 0.5 15 1 ABK32445 Human colon cancer
 1733 10.8 0.5 15 1 ABK32445 Human colon cancer
 1734 10.8 0.5 15 1 ABK32445 Human colon cancer
 1735 10.8 0.5 15 1 ABK32445 Human colon cancer
 1736 10.8 0.5 15 1 ABK32445 Human colon cancer
 1737 10.8 0.5 15 1 ABK32445 Human colon cancer
 1738 10.8 0.5 15 1 ABK32445 Human colon cancer
 1739 10.8 0.5 15 1 ABK32445 Human colon cancer
 1740 10.8 0.5 15 1 ABK32445 Human colon cancer
 1741 10.8 0.5 15 1 ABK32445 Human colon cancer
 1742 10.8 0.5 15 1 ABK32445 Human colon cancer
 1743 10.8 0.5 15 1 ABK32445 Human colon cancer
 1744 10.8 0.5 15 1 ABK32445 Human colon cancer
 1745 10.8 0.5 15 1 ABK32445 Human colon cancer

ALIGNMENTS

RESULT 1
 AAA95191/c
 ID AAA95191 standard; DNA; 25 BP.
 XX AAA95191;
 AC AAA95191;
 XX
 DT 12-JAN-2001 (first entry)
 XX
 DE Reverse primer used to amplify exon 6 of TNFR1 gene.
 XX
 KW TNFR1; tumour necrosis factor receptor; polymorphism; human; tumour;
 KW cancer; apoptosis; bacterial infection; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200050436-A1.
 XX
 XX 31-AUG-2000.
 XX
 PF 23-FEB-2000; 2000WO-US004606.
 XX
 PR 23-FEB-1999; 99US-0121314P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 PA (NAND/) NANDABALAN K.
 PA (SCHU/) SCHULZ V P.
 PA (STEP/) STEPHENS J C.
 PA (CHEW/) CHEW A.
 XX
 PI Nandabalan K, Schulz VP, Stephens JC, Chew A;
 XX
 DR WPI; 2000-543909/49.
 XX
 PT Polynucleotides comprising polymorphic variants of a reference sequence
 for tumor necrosis factor receptor 1 (TNFR1), useful for studying the

PT biological function of TNFR1 and identifying drugs targeting the protein
 for treating disorders.
 PT
 XX Example 1; Page 31; 79pp; English.
 XX
 CC The present invention relates to polymorphic variants of the tumour
 necrosis factor receptor 1 (TNFR1) gene. The sequence of the gene is
 given in AAA95102, AAA95103 and AAA95104. The polymorphisms were
 identified by amplifying and sequencing regions of the gene. Twelve
 polymorphic loci were discovered. Of these twelve polymorphisms, four can
 cause a change in the TNFR1 protein. The present sequence is a primer
 used to amplify part of the TNFR1 gene. The TNFR1 polymorphisms may be
 useful for studying the biological function of TNFR1 as well as for
 identifying drugs targeting the protein for treatment of disorders
 CC related to its abnormal expression or function such as tumours, apoptosis
 CC related disorders and bacterial infection
 XX
 SQ Sequence 25 BP; 5 A; 8 C; 4 G; 8 T; 0 U; 0 Other;
 Query Match 1.2%; Score 25; DB 1; Length 25;
 Best Local Similarity 100.0%; Pred. No. 0.73;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 855 GAATGTTAAGGCACTGAGGACTCA 879
 Db 25 GAATGTTAAGGCACTGAGGACTCA 1
 RESULT 2
 AAZ09169/c
 ID AAZ09169 standard; DNA; 29 BP.
 XX
 AC AAZ09169;
 XX
 DT 20-MAR-2003 (revised)
 DT 18-OCT-1999 (first entry)
 XX
 DE Human 55kDa tumour necrosis factor binding protein PCR primer 2.
 KW Tumour necrosis factor binding protein; TNF; insoluble protein; agonist;
 KW anti-inflammatory; antimalarial; treatment; septic shock; inflammation;
 KW autoimmune glomerulonephritis; cerebral malaria; immune response;
 KW antagonist; diagnosis; PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN EP939121-A2.
 XX
 PD 01-SEP-1999.
 XX
 PF 31-AUG-1990; 99EP-00100703.
 XX
 PR 12-SEP-1989; 89CH-00003319.
 PR 08-MAR-1990; 90CH-00000746.
 PR 20-APR-1990; 90CH-00001347.
 PR 31-AUG-1990; 90EP-00116707.
 XX
 PA (HOFF) HOFFMANN LA ROCHE & CO AG F.
 XX
 PI Brockhaus M, Dembic Z, Gentz R, Lesslauer W, Loetscher H;
 PI Schlaefer E;
 XX
 DR WPI; 1999-480840/41.
 XX
 PT New insoluble proteins, and fragments, that bind to tumor necrosis
 factor, used to treat e.g. septic shock or cerebral malaria.
 XX
 PS Example 11; Page 16; 25pp; German.
 CC This invention describes novel homogeneous insoluble proteins (I), their
 (insoluble fragments (Ia) and their salts that can bind tumour necrosis
 factor (TNF). The products of the invention have anti-inflammatory and

CC antimalarial activity. (I) and (Ia) are used (i) to treat diseases in
 CC which TNF is involved (e.g. septic shock, autoimmune glomerulonephritis,
 CC cerebral malaria, immune responses and inflammation), (ii) to purify TNF,
 CC (iii) to identify TNF (ant)agonists and (iv) for diagnostic determination
 CC of TNF in body fluids. Antibodies raised against (I) are used for
 CC affinity purification of (I). This sequence represents a PCR primer used
 CC in the amplification of the TNF binding protein of the invention.
 CC (Updated on 20-MAR-2003 to correct PF field.) (Updated on 20-MAR-2003 to
 CC correct PR field.)
 XX
 SQ Sequence 29 BP; 5 A; 7 C; 9 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 23.8; DB 1; Length 29;
 Best Local Similarity 92.6%; Pred. No. 2.6;
 Matches 25; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 869 CTGAGGACTCAGGCACACAGTCTCT 895
 Db 29 CTGAGGACTCAGGCACACAGTCTCT 3

RESULT 3
 AAH48858/c
 ID 'AAH48858 standard; DNA; 29 BP.
 XX
 AC AAH48858;
 XX
 DT 12-NOV-2001 (first entry)
 XX
 DE Human 55 kD TNF β extracellular fragment PCR primer 2.
 XX
 KW TNF; tumor necrosis factor binding protein; TNF β ; treatment;
 KW insoluble protein; antiinflammatory; immunosuppressive; antibacterial;
 KW antiprotozoal; treatment; meningococcal sepsis; cerebral malaria;
 KW autoimmune glomerulonephritis; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1132471-A2.
 XX
 PD 12-SEP-2001.
 XX
 PF 31-AUG-1990; 2001EP-00108117.
 XX
 PR 12-SEP-1989; 89CH-00003319.
 PR 08-MAR-1990; 90CH-00000746.
 PR 20-APR-1990; 90CH-00001347.
 PR 31-AUG-1990; 90EP-00116707.
 PR 31-AUG-1990; 99EP-00100703.
 XX

PA (HOFF) HOFFMANN LA ROCHE & CO AG F.

PI Brockhaus M, Dembic Z, Gentz R, Lesslauer W, Loetscher H;
 PI Schlaeger E;
 XX

DR WPI; 2001-559312/63.

XX New homogeneous, insoluble proteins that bind tumor necrosis factor
 PT (TNF), useful for treating TNF-mediated disorders, e.g. inflammation.
 PT
 XX

PS Example 11; Page 16; 26pp; German.

XX This invention describes novel insoluble proteins (I), also their
 CC (insoluble) fragments and pharmaceutically acceptable salts, able to bind
 CC tumor necrosis factor (TNF) and in homogeneous form. The products of the
 CC invention have antiinflammatory, immunosuppressive, antibacterial,
 CC antiprotozoal activity. (I), and related recombinant proteins, are used
 CC to treat diseases mediated by TNF, e.g. shock in cases of meningococcal
 CC sepsis; development of autoimmune glomerulonephritis and cerebral
 CC malaria. Also (I), or antibodies specific for them, are used for
 CC diagnostic determination of TNF in body fluids, for affinity purification
 CC of TNF and for identifying (ant)agonists of TNF. This sequence represents
 CC a PCR primer used in the amplification of the human 55 kD TNF β described

CC in the method of the invention
 XX
 SQ Sequence 29 BP; 5 A; 7 C; 9 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 23.8; DB 1; Length 29;
 Best Local Similarity 92.6%; Pred. No. 2.6;
 Matches 25; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 869 CTGAGGACTCAGGCACACAGTCTCT 895
 Db 29 CTGAGGACTCAGGCACACAGTCTCT 3

RESULT 4
 AAT94017/c
 ID AAT94017 standard; DNA; 21 BP.
 XX
 AC AAT94017;
 XX
 DT 19-MAR-1998 (first entry)
 XX
 DE Primer for TPO/hCG fusion gene.
 XX
 KW Fusion protein; thrombopoietin; TPO; human chorionic gonadotropin; hCG;
 KW PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9730161-A1.
 XX
 PD 21-AUG-1997.
 XX
 PF 20-FEB-1997; 97WO-US002315.
 XX
 PR 20-FEB-1996; 96US-0011936P.
 XX
 PA (ISTF) ARS APPLIED RES SYSTEMS HOLDING NV.
 XX
 PI Campbell RK, Jameson BA, Chappel SC;
 XX
 DR WPI; 1997-425036/39.
 XX

PT Hybrid dimeric protein comprising two co-expressed units - each based on
 PT receptor or ligand and a subunit of a heterodimeric hormone, especially
 PT FSH, for inducing follicular maturation.
 XX

PS Example; Page 16; 60pp; English.

XX A novel fusion protein comprises 2 dimer forming co-expressed amino acid
 CC sequences, each consisting of a homodimeric or heterodimeric receptor
 CC chain or ligand, with ligand-receptor binding activity, bound directly or
 CC via a peptide linker to a subunit of a heterodimeric protein hormone
 CC capable of forming a heterodimer with the hormone's other subunits. The
 CC fusion protein, e.g. the thrombopoietin (TPO)/human chorionic
 CC gonadotropin (hCG) fusion protein encoded by the fusion gene amplified
 CC by the present sequence, significantly increases the biological activity
 CC of the hormone component, reducing the requirement for hormone itself and
 CC the number of injections needed
 XX

SQ Sequence 21 BP; 2 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 1.0%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 5.1;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 868 ACTGAGGACTCAGGCACACCA 888
 Db 21 ACTGAGGACTCAGGCACACCA 1

RESULT 5
 AAL49614/c

```

ID AAL49614 standard; DNA; 21 BP.
XX AC AAL49614;
XX DT 27-NOV-2002 (first entry)
XX DE Tumour differentiation effecting protein TL4 related PCR primer #18.
XX KW Mouse; tumour differentiation; rhabdosarcoma; leiomyosarcoma; rat; ss;
XX KW muscular dystrophy; uterine myoma; cytostatic; plasmic change; TL4;
XX KW human; PCR; primer.
XX OS Unidentified.
XX PN WO200266049-A1.
XX PD 29-AUG-2002.
XX PF 21-FEB-2002; 2002WO-JP001536.
XX PR 23-FEB-2001; 2001JP-00049450.
XX PA (TAKE ) TAKEDA CHEM IND LTD.
XX PI Hikichi Y, Shintani Y, Matsui H;
XX DR WPI; 2002-674894/72.
XX PT Plasmic change agents and antibodies to them for diagnosis and treatment
XX PT of tumours of muscle tissue and of muscular dystrophy.
XX PS Example 1; Page 127; 136pp; Japanese.
XX CC The present invention relates to plasmic change agents with cell
XX CC differentiation activity containing protein TL4. These can be used in the
XX CC treatment, prevention and diagnosis of rhabdosarcoma, leiomyosarcoma,
XX CC muscular dystrophy and uterine myeloma. The present sequence is a PCR
XX CC primer used in the exemplification of the invention
XX SQ Sequence 21 BP; 1 A; 5 C; 6 G; 9 T; 0 U; 0 Other;
Query Match 1.0%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 5.1;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 727 TGCCAGGAGAAACAGACACC 747
Db 21 TGCCAGGAGAAACAGACACC 1
RESULT 6
ABA99921/c
ID ABA99921 standard; DNA; 29 BP.
XX AC ABA99921;
XX DT 05-JUL-2002 (first entry)
XX DE Human TNFR1 PCR primer SEQ ID 15.
XX KW Prodrug; TNF; tumour necrosis factor; selectokine; chimeric; W24; W33;
XX KW cytostatic; immunomodulatory; antiangiogenic; apoptosis inducer;
XX KW gene therapy; scfv antibody OS4; fibroblast activation protein; tenascin;
XX KW solid tumour; angiogenesis; treatment; infection; metabolic disease; PCR;
XX KW primer; ss.
XX OS Homo sapiens.
XX PN WO200222833-A1.
XX PD 21-MAR-2002.
XX PF 17-SEP-2001; 2001WO-EP010730.

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XX PR 15-SEP-2000; 2000DE-01045592.
XX PA (UYST-) UNIV STUTTGART.
XX PA (PFIZ/) PFIZENMAIER K.
XX PI Pfizenmaier K, Wuest T, Moosmayer D, Grell M, Scheurich P;
XX WPI; 2002-362351/39.
XX DR New polypeptide prodrug, useful e.g. for treating tumors, contains
XX PT targeting region, active agent and attached inhibitor that is
XX PT proteolytically cleaved in target cells.
XX PS Example 6; Page 47; 52pp; German.
XX CC This invention describes a novel polypeptide (I) comprising, in the N to
XX CC C direction, a region (R1) that recognises selectively a specific
XX CC macromolecule on a cell surface and/or a component of the extracellular
XX CC matrix, peptide linker, a region (R2) with biological activity for a
XX CC specific target molecule, a region (R3) that has a processing site and a
XX CC region (R4) that inhibits the activity of R2, by intramolecular bonding
XX CC and/or interaction. The products of the invention have cytostatic,
XX CC immunomodulatory and antiangiogenic activity, induce apoptosis and can be
XX CC used for gene therapy. Kym-1 cells (20000) were incubated with the
XX CC prodrug W24, containing, essentially, the single-chain Fv antibody OS4,
XX CC specific for human fibroblast activation protein, trimerization linker, a
XX CC mutant form of the tumour necrosis factor (TNF) precursor protein, a
XX CC region with a proteolytic cleavage site, and human TNF receptor-1
XX CC fragment, and with trypsin (activator) for 5 minutes. After 16 hours,
XX CC cell viability was determined by MTT staining. Activated W24 had LD50
XX CC about 0.5 ng/ml, comparable with that for wild-type TNF and 4000 times
XX CC higher than for uncleaved W24. (I), also nucleic acids encoding them and
XX CC related vectors, are useful particularly for treating solid tumours
XX CC and/or pathological angiogenesis, also generally for treating infections
XX CC and metabolic diseases. (I) are prodrug forms of R2 that have
XX CC unacceptable toxicity when administered systemically (specifically tumour
XX CC necrosis factor) and allow these compounds to be administered safely with
XX CC retention of, or even increase in, therapeutic activity. R2 is released
XX CC only in target tissue, resulting in a high local concentration, and
XX CC activity is potentiated by co-activation of receptors. This sequence
XX CC represents a PCR primer for the amplification of the human TNFR1 fragment
XX CC used in the construction of the TNF-selectokine W24 and W33 prodrugs
XX CC described in the disclosure of the invention
XX SQ Sequence 29 BP; 3 A; 9 C; 10 G; 7 T; 0 U; 0 Other;
Query Match 1.0%; Score 21; DB 1; Length 29;
Best Local Similarity 82.8%; Pred. No. 15;
Matches 24; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 739 CAGAACACCGGTGCACCTGCATCGCAGG 767
Db 29 CAGAACACCGGTGCACCGGATCCGAGG 1
RESULT 7
AAV55815
ID AAV55815 standard; DNA; 24 BP.
XX AC AAV55815;
XX DT 27-AUG-2003 (revised)
XX DT 18-NOV-1998 (first entry)
XX DE Multimerisation of minimal motifs using primer ZGS2.
XX KW Fusion protein; stabilising polypeptide; proteolytic degradation;
XX KW resistance; half-life; autoimmune disease; inflammation; nitro drug;
XX KW IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;
XX KW nitroreductase protein; enzyme therapy; prodrug therapy; protease;
XX KW cancer; pathological condition; minimal motif; PCR primer; ss.

```


PT core protein with a stabilising polypeptide comprising a peptide sequence
PT containing glycine repeats.

PS Disclosure; Page 72; 120pp; English.

XX Sequences shown in AAV55812 to AAV55827 represent primers used in the
CC course of the invention for the multimerisation of minimal motifs. The
CC invention provides a method for increasing the resistance of a core
CC protein to proteolytic degradation that comprises linking or inserting
CC onto or into the core protein a stabilising polypeptide of formula
CC ((Glya)(Glyb))_n where Glya, Glyb, Glyc are 1-6 sequential Gly
CC residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
CC and n can be anything between 1-66. X, Y and Z need not be identical from
CC n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
CC polypeptide can be linked onto or inserted into a nucleic acid encoding a
CC core protein. The fusion proteins of the invention are more resistant to
CC degradation by proteases and, thus, have a longer half-life than the
CC unfused core proteins. The products can be used for treating autoimmune
CC diseases, cancer and inflammation. In particular, the core protein may be
CC an IkappaB regulator protein for the treatment of inflammatory bowel
CC disease, or a nitroreductase protein which can activate nitro drugs in
CC enzyme/prodrug therapy to treat cancer or other pathological conditions.
CC The fusion proteins can also be used in diagnostic methods such as in
CC vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)

XX SQ Sequence 24 BP; 3 A; 14 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 25;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1125 TTCCACCTTCACCTCCAGTCCAC 1148

Db 1 TTCCACCCGACCTCCAGTCTCTC 24

RESULT 10

AAAF24737/c

ID AAF24737 standard; DNA; 27 BP.

XX AC AAF24737;

XX 20-APR-2001 (first entry)

XX PCR primer used to amplify DNA encoding CDB-Tma peptide.

XX Protein production; food processing; protein antibiotic; feed enzyme;
KW CDB-Tma; PCR primer; ss.

XX Unidentified.

XX WO20007174-A1.

XX 21-DEC-2000.

XX 07-JUN-2000; 2000WO-11000330.

XX 10-JUN-1999; 99US-00329234.

XX (CBT-) CDB TECHNOLOGIES LTD.

PA (YISS) YISSUM RES DEV CO HEBREW UNIV JERUSALEM.

XX Shani Z, Shoseyov O;

XX WPI; 2001-112219/12.

XX Expressing and isolating recombinant protein in a plant, useful for
PT producing large quantities of recombinant proteins, by expressing a
PT fusion protein including a cellulose binding peptide fused to a
PT recombinant protein.

XX Example; Page 48; 87pp; English.

CC The specification describes a method for expressing and isolating a
CC recombinant protein in a plant. The method comprising expressing a fusion
CC protein including the recombinant protein and a cellulose binding peptide
CC fused to it, where the fusion protein is compartmentalised and
CC sequestered within plant cells, plant derived tissue or cultured plant
CC cells. The method is useful for obtaining large quantities of the
CC recombinant proteins and protein products in a simple and cost-effective
CC manner. Recombinant proteins may be used commercially, such as in the
CC food processing industry, e.g. glucoamylases and glucose isomerases are
CC used for converting starch to high fructose corn syrup, proteinases for
CC the hydrolysis of high molecular weight proteins and in manufacturing
CC leather or alcoholic beverages, pectinesterases for pectin hydrolysis in
CC food industry, lipases for cleaving ester linkage in triglycerides, and
CC for effluent treatment. The recombinant proteins may further be used to
CC produce protein antibiotics, which can be used in healing processes, and
CC to produce animal feed enzymes. PCR primers AAF24736-37 were used to
CC amplify DNA encoding a CDB-Tma peptide. The amplified fragment was used
CC to produce the fusion proteins of the invention

XX SQ Sequence 27 BP; 7 A; 4 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 19.2; DB 1; Length 27;

Best Local Similarity 87.5%; Pred. No. 37;

Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1246 TCCGACCCCATCCCAACCCCTT 1269

Db 26 TCCGACCCCATCCCAACCGCTT 3

RESULT 11

AAV55821

ID AAV55821 standard; DNA; 24 BP.

XX AC AAV55821;

XX 27-AUG-2003 (revised)

XX 18-NOV-1998 (first entry)

XX Multimerisation of minimal motifs using primer ZGY2.

XX Fusion protein; stabilising polypeptide; proteolytic degradation;

XX resistance; half-life; autoimmune disease; inflammation; nitro drug;

XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;

XX nitroreductase protein; enzyme therapy; prodrug therapy; protease;

XX cancer; pathological condition; minimal motif; PCR primer; ss.

XX Synthetic.

OS Human herpesvirus 4.

XX WO9822577-A1.

XX 28-MAY-1998.

XX 17-NOV-1997; 97WO-1B001508.

XX 15-NOV-1996; 96US-0030986P.

XX 25-JUN-1997; 97US-0048945P.

XX (MASU/) MASUCCI M G.

XX Masucci MG;

XX WPI; 1998-312463/27.

XX New fusion proteins resistant to proteolytic degradation - comprising a
PT core protein with a stabilising polypeptide comprising a peptide sequence
PT containing glycine repeats.

XX Disclosure; Page 72; 120pp; English.

XX Sequences shown in AAV55812 to AAV55827 represent primers used in the
CC course of the invention for the multimerisation of minimal motifs. The

CC invention provides a method for increasing the resistance of a core
CC protein to proteolytic degradation that comprises linking or inserting
CC onto or into the core protein a stabilising polypeptide of formula
CC [(Glya)X(Glyb)X(Glyc)Z]_n where Glya, Glyb, Glyc are 1-6 sequential Gly
CC residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
CC and n can be anything between 1-66. X, Y and Z need not be identical from
CC n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
CC polypeptide can be linked onto or inserted into a nucleic acid encoding a
CC core protein. The fusion proteins of the invention are more resistant to
CC degradation by proteases and, thus, have a longer half-life than the
CC unfused core protein. The products can be used for treating autoimmune
CC diseases, cancer and inflammation. In particular, the core protein may be
CC an IkappaB regulator protein for the treatment of inflammatory bowel
CC disease, or a nitroreductase protein which can activate nitro drugs in
CC enzyme/prodrug therapy to treat cancer or other pathological conditions.
CC The fusion proteins can also be used in diagnostic methods such as in
CC vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ Sequence 24 BP; 5 A; 13 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 18.8; DB 1; Length 24;
Best Local Similarity 90.3%; Pred. No. 32;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1126 TCACCTTCACCTCCAGCTCCA 1147
Db 2 TCACCCGCGACCTCCAGCTCCA 23

RESULT 12
ABK97993/c
ID ABK97993 standard; DNA; 23 BP.
XX
AC ABK97993;
XX
DT 07-OCT-2002 (first entry)
XX
DE Cell-TRAP method associated GATA mut oligonucleotide.
DE
KW Transcription factor; transcription factor-responsive element; ds; TPFE;
KW transcription activation; Cell-TRAP.
XX
OS Synthetic.
XX
PN WC200252039-A2.
XX
PD 04-JUL-2002.
XX
PF 21-DEC-2001; 2001WO-CA001861.
XX
PR 27-DEC-2000; 2000CA-02327581.
XX
PA (GENE-) GENEKA BIOTECHNOLOGY INC.
XX
PI Blais Y, Rousseau P, Leblanc B, Camato RN;
XX
DR WPI; 2002-575388/61.
XX
XX
XX A Cell-TRAP method, useful for producing or validating therapeutic
XX compounds, by employing a recombinant cell-based library that carry
XX constructs driven by a minimal promoter and a transcription factor-
XX responsive element.
XX
XX Disclosure; Page 24; 44pp; English.
XX
XX This invention relates to a cell-TRAP method for selecting and producing
XX a therapeutic compound which is presumed selective for, one or a
XX restricted set of given transcriptional pathways and cell types by
XX employing a recombinant cell-based library that carries a construct
XX comprising a reporter gene driven by a minimal promoter and a
XX transcription factor-responsive element (TPFE). The invention also
XX comprises a method for validating a putative compound as a selective
XX therapeutic compound towards a transcription factor response element. The

CC method of the invention is useful for determining the transcriptional
CC activation pathways used by any compound that is biologically active in a
CC cell. This method allows a global view of gene transcription activation
CC in response to diverse stimuli in multiple environments and is a
CC significant improvement over case-by-case approaches, which would be
CC limited to certain aspects of gene activation. It permits to save on
CC clinical trials by screening properly the compounds that would have a
CC lesser probability of providing undesirable, even severe side effects.
CC The present sequence represents a double stranded oligonucleotide probe
CC recognised by a specific transcription factor which is used in the method
CC of the invention
XX
SQ Sequence 23 BP; 2 A; 9 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 18.2; DB 1; Length 23;
Best Local Similarity 87.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1183 CCGCGCAGAGAGGTGGCACC 1205
Db 23 CCGCGCAGAGAGGTGGCAGTCC 1

RESULT 13
AAQ61892/c
ID AAQ61892 standard; DNA; 25 BP.
XX
AC AAQ61892;
XX
DT 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
DE HSV replication inhibiting oligomer, ISIS no 5366.
XX
KW Inhibition; replication; herpes simplex virus; HSV; HIV;
KW human cytomegalovirus; influenza virus; inflammation;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy;
KW telomere length; retard; aging; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..25
FT FT /*tag= a
FT FT /note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Claim 5; Page 19; 144pp; English.
XX
XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and

neurological disorders caused by phospholipase A2 activity in cases of hyperproliferation, malignancy, cardiovascular disease and snake bite. They may also be used for inhibiting division of malignant cells by modulating telomere length, which may also retard aging. (Updated on 25-MAR-2003 to correct PN field.)

Sequence 25 BP: 0 A; 0 C; 17 G; 8 T; 0 U; 0 Other; 0 X

SQ Sequence 25 BP; 0 A; 0 C; 17 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

SQ Sequence 25 BP; 0 A; 0 C; 17 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 53;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

CC uptake. Further, since they contain amides of non-biological amino acids,
 CC they are biostable and resistant to enzymatic degradation by proteases.
 CC The present sequence is a specifically claimed PNA sequence (represented
 CC by the sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-
 XX 2003 to correct PN field.)

SQ Sequence 25 BP; 0 A; 0 C; 17 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred.No. 53;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1244 CCTCCGACCCCATCCCAACCCC 1266

Db 25 CCCCCAACCCCAACCCCAACCCC 3

RESULT 16

AAT87450/c

ID AAT87450 standard; DNA; 18 BP.

XX AAT87450;

XX 25-MAR-2003 (revised)

DT 13-JAN-1998 (first entry)

XX p55 extracellular domain 3' oligonucleotide primer.

XX TNF; tumour necrosis factor; Crohn's disease; cA2 antibody; ss.

XX Synthetic.

XX US5656272-A.

XX 12-AUG-1997.

XX 04-FEB-1994; 94US-00192102.

XX 18-MAR-1991; 91US-00670827.

XX 18-MAR-1992; 92US-00853606.

XX 11-SEP-1992; 92US-00943852.

XX 26-JAN-1993; 93US-00010406.

XX 02-FEB-1993; 93US-00013413.

XX (CENZ) CENTOCOR INC.

XX (UYNY-) UNIV NEW YORK MEDICAL CENT.

XX Dadonna P, Le J, Ghayeb J, Knight D, Siegel SA, Vilcek J;

XX WPI; 1997-414547/38.

XX Treatment of Crohn's disease - by administering humanised cA2 antibody

XX specific for tumour necrosis factor.

XX Example 24; Col 95/96; 87pp; English.

XX Example 24 describes the p55 fusion protein structure. The fused genes
 CC included the promoter and leader peptide coding sequence of a highly
 CC expressed chimeric mouse-human antibody on the 5' side of the TNF
 CC receptor insert, and codons for eight amino acids of human J sequence
 CC (AAW28533 or AAW28534) and a genomic fragment encoding all three constant
 CC domains of IgG1 on the 3' side of the receptor insert positions. (Updated
 CC on 25-MAR-2003 to correct PF field.)

XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred.No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 835 TTGTGCTACCCAGATT 852

Db 18 TTGTGCTACCCAGATT 1

RESULT 17

AAV03624/c

ID AAV03624 standard; cDNA; 18 BP.

XX AAV03624;

XX 02-APR-1998 (first entry)

DE 3' primer for p55 used in construction of chimeric anti-TNF Ab.

XX Tumour necrosis factor; human; hTNF; rheumatoid arthritis; malignancy;
 KW anti-TNF chimeric antibody; inhibitor; therapy; diagnosis; infection;
 KW chronic inflammatory disease; autoimmune disease; light chain; amplify;
 KW neurodegenerative disease; variable region; PCR primer; ss.

XX Synthetic.

XX Homo sapiens.

XX US5698195-A.

XX 16-DEC-1997.

XX 18-OCT-1994; 94US-00324799.

XX 18-MAR-1991; 91US-00670827.

XX 18-MAR-1992; 92US-00853606.

XX 11-SEP-1992; 92US-00943852.

XX 29-JAN-1993; 93US-00010406.

XX 02-FEB-1993; 93US-00013413.

XX 04-FEB-1994; 94US-00192061.

XX 04-FEB-1994; 94US-00192093.

XX 04-FEB-1994; 94US-00192102.

XX (CENZ) CENTOCOR INC.

XX (UYNY-) UNIV NEW YORK MEDICAL CENT.

XX Siegel S, Knight D, Vilcek J, Ghayeb J, Le J, Daddona P;

XX WPI; 1998-051431/05.

XX Treatment of rheumatoid arthritis - with chimeric antibody directed

XX against tumour necrosis factor.

XX Example 26; Col 93; 93pp; English.

XX This sequence represents a primer used in the construction of a chimeric
 CC antibody used in the method of the invention. The method of the invention
 CC is for treating rheumatoid arthritis in a human, and comprises
 CC administering to the human an effective tumour necrosis factor- (TNF)
 CC inhibiting amount of an anti-TNF chimeric antibody (Ab), where the anti-
 CC TNF chimeric Ab comprises a non-human variable region or a TNF antigen
 CC binding portion of the variable region, and a human constant region. The
 CC method can be used for in vitro, in situ and/or in vivo diagnosis and/or
 CC treatment of animal cells, tissues or pathologies associated with the
 CC presence of TNF. The Abs used in the method can also be used for removing
 CC TNF from a solution or cells, inhibiting one or more biological
 CC activities of TNF in vitro, in situ or in vitro. Such removal can include
 CC treatment methods of the invention for alleviating symptoms or
 CC pathologies involving TNF, such as bacterial, viral or parasitic
 CC infections, chronic inflammatory diseases, autoimmune diseases,
 CC malignancies and/or neurodegenerative diseases

XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred.No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 835 TTGTGCTACCCAGATT 852

Db 18 TTGTGCTACCCAGATT 1


```

RESULT 18
AAZ81714/c
ID AAZ81714 standard; cDNA; 18 BP.
XX
AC AAZ81714;
XX
DT 27-AUG-1999 (first entry)
XX
DE Primer used to construct the chimeric antibody of the invention.
XX
KW Human tumour necrosis factor-alpha; TNF-alpha; immune disease;
KW TNF-alpha mediated disease; anti-TNF chimeric antibody;
KW monoclonal antibody cA2; autoimmune disease; inflammatory disease;
KW neurodegenerative disorder; cerebellar cortical degeneration;
KW multiple system degeneration; multi-system disorder; Senile Dementia;
KW amyotrophic lateral sclerosis; spinal muscular atrophy; PCR primer;
KW Alzheimer's disease; Down's Syndrome; Diffuse Lewy body disease;
KW Wernicke-Korsakoff syndrome; chronic alcoholism;
KW lymphoma Creutzfeldt-Jakob disease;
KW sub-acute sclerosing panencephalitis; Hallerorden-Spatz disease;
KW dementia pugilistica; leukemia; ss.
XX
OS Synthetic.
XX
PN US5919452-A.
XX
PD 06-JUL-1999.
XX
PF 04-FEB-1994; 94US-00192861.
XX
PR 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
XX
PA (GENZ ) CENTOCOR INC.
PA (UYN ) UNIV NEW YORK STATE.
XX
PI Dadonna P, Le J, Ghayeb J, Knight D, Seigal S, Vilcek J;
XX
WPI; 1999-403943/34.
XX
PT Treatment of tumor necrosis factor-alpha mediated disease using chimeric
PS antibodies.
XX
PS Example 24; Col 84; 90pp; English.
XX
CC The present PCR primer was used to construct a chimeric antibody for use
CC in the method of the invention. The specification describes a method for
CC treating tumor necrosis factor-alpha (TNF-alpha) mediated disease (not
CC resulting from infection) using an anti-TNF chimeric antibody that
CC inhibits the binding of TNF to monoclonal antibody cA2. The methods and
CC chimeric antibodies are useful for treating and/or diagnosing TNF-alpha
CC mediated diseases such as immune and autoimmune pathologies e.g.
CC rheumatoid arthritis and especially systemic lupus erythematosus (SLE),
CC thyroiodosis, graft versus host disease, scleroderma, diabetes mellitus,
CC and Graves' disease; inflammatory diseases (other than septic shock),
CC neurodegenerative disorders, cerebellar cortical degenerations, multiple
CC systems degenerations (e.g. Mancel, Dejerine-Thomas, Shi-Drager, and
CC Machado-Joseph), Reissum's disease, abetalipoproteinemia, ataxia,
CC telangiectasia, mitochondrial multi-system disorder, amyotrophic lateral
CC sclerosis, infantile and juvenile spinal muscular atrophy, Alzheimer's
CC disease, Down's Syndrome in middle age, Diffuse Lewy body disease, Senile
CC Dementia of Lewy body type, Wernicke-Korsakoff syndrome, chronic
CC alcoholism, Creutzfeldt-Jakob disease, sub-acute sclerosing
CC panencephalitis, Hallerorden-Spatz disease, dementia pugilistica,
CC leukemias, lymphomas, other TNF-secreting tumors or alcohol-induced
CC hepatitis
XX
SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTACCCAGATT 852
DB 18 TTGTGCTACCCAGATT 1

RESULT 19
AAZ48535/c
ID AAZ48535 standard; DNA; 18 BP.
XX
AC AAZ48535;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18928.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PS diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GAAGGAAGTACTACTAAG 1050
DB 18 GAAGGAAGTACTACTAAG 1

RESULT 20
AAZ48525/c
ID AAZ48525 standard; DNA; 18 BP.
XX
AC AAZ48525;
XX

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DT 31-MAR-2000 (first entry)
XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18918.
XX Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX Synthetic.
XX Homo sapiens.
XX US6007995-A.
XX 28-DEC-1999.
XX 26-JUN-1998; 98US-00106038.
XX 26-JUN-1998; 98US-00106038.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowsett LM;
XX WPI; 2000-105333/09.
XX Antisense inhibition of tumor necrosis factor type 1 expression for
XX diagnosis, treatment and prevention of disease, particularly tumors.
XX Example 10; Col 25; 34pp; English.
XX The invention provides antisense compounds targeted to human tumour
XX necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX can be used in a method of inhibiting the expression of TNFR1 human cells
XX or tissues. The antisense compounds specifically hybridize with one or
XX more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX produced. The antisense compounds and method are useful as research
XX reagents and diagnostics, and in the treatment and prophylaxis of
XX infection, inflammation or tumour formation. Sequences AAZ48482-565
XX represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX Qy 807 CTGTAAGAAAGCCTGGA 824
XX Db 18 CTGTAAGAAAGCCTGGA 1
XX RESULT 21
XX AAZ48533/c
XX ID AAZ48533 standard; DNA; 18 BP.
XX AC AAZ48533;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18926.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX XX Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX 26-JUN-1998; 98US-00106038.
XX XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX Qy 807 CTGTAAGAAAGCCTGGA 824
XX Db 18 CTGTAAGAAAGCCTGGA 1
XX RESULT 22
XX AAZ48522/c
XX ID AAZ48522 standard; DNA; 18 BP.
XX AC AAZ48522;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18915.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX XX Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX 26-JUN-1998; 98US-00106038.
XX 26-JUN-1998; 98US-00106038.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowsett LM;
XX WPI; 2000-105333/09.
XX Antisense inhibition of tumor necrosis factor type 1 expression for
XX diagnosis, treatment and prevention of disease, particularly tumors.
XX Claim 1; Col 25; 34pp; English.
XX The invention provides antisense compounds targeted to human tumour
XX necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX can be used in a method of inhibiting the expression of TNFR1 human cells
XX or tissues. The antisense compounds specifically hybridize with one or
XX more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX produced. The antisense compounds and method are useful as research
XX reagents and diagnostics, and in the treatment and prophylaxis of
XX infection, inflammation or tumour formation. Sequences AAZ48482-565
XX represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX Qy 952 ATGTATCGCTACCAACGG 969
XX Db 18 ATGTATCGCTACCAACGG 1
XX RESULT 22
XX AAZ48522/c
XX ID AAZ48522 standard; DNA; 18 BP.
XX AC AAZ48522;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18915.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX XX Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX 26-JUN-1998; 98US-00106038.
XX 26-JUN-1998; 98US-00106038.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowsett LM;
XX WPI; 2000-105333/09.
XX Antisense inhibition of tumor necrosis factor type 1 expression for
XX diagnosis, treatment and prevention of disease, particularly tumors.
XX Claim 1; Col 25; 34pp; English.
XX The invention provides antisense compounds targeted to human tumour
XX necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX can be used in a method of inhibiting the expression of TNFR1 human cells
XX or tissues. The antisense compounds specifically hybridize with one or
XX more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX produced. The antisense compounds and method are useful as research
XX reagents and diagnostics, and in the treatment and prophylaxis of
XX infection, inflammation or tumour formation. Sequences AAZ48482-565
XX represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX Qy 952 ATGTATCGCTACCAACGG 969
XX Db 18 ATGTATCGCTACCAACGG 1

```

CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
 XX
 SQ Sequence 18 BP; 6 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 786 CGAGTGTCTCTCTGTAG 803
 DB 18 CGAGTGTCTCTCTGTAG 1

RESULT 23
 AAZ48524/C
 ID AAZ48524 standard; DNA; 18 BP.
 XX AC
 AC AAZ48524;
 DT 31-MAR-2000 (first entry)
 XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18917.
 DE Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
 KW inflammation; tumour formation; TNFR1; anticancer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX US6007995-A.
 PD 28-DEC-1999.
 XX 26-JUN-1998; 98US-00106038.
 PR 26-JUN-1998; 98US-00106038.
 XX (ISIS-) ISIS PHARM INC.
 PA Baker BF, Cowser LM;
 PI WPI; 2000-105333/09.
 XX Antisense inhibition of tumor necrosis factor type 1 expression for
 PT diagnosis, treatment and prevention of disease, particularly tumors.
 PS Claim 1; Col 25; 34pp; English.

CC The invention provides antisense compounds targeted to human tumour
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
 CC can be used in a method of inhibiting the expression of TNFR1 human cells
 CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
 XX
 SQ Sequence 18 BP; 3 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 802 AGTAACCTGTAGAAAGC 819
 DB 18 AGTAACCTGTAGAAAGC 1

DB 18 AGTAACCTGTAGAAAGC 1

RESULT 24
 AAZ48528/C
 ID AAZ48528 standard; DNA; 18 BP.
 XX AC
 AC AAZ48528;
 DT 31-MAR-2000 (first entry)
 XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18921.
 DE Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
 KW inflammation; tumour formation; TNFR1; anticancer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX US6007995-A.
 PD 28-DEC-1999.
 XX 26-JUN-1998; 98US-00106038.
 PR 26-JUN-1998; 98US-00106038.
 XX (ISIS-) ISIS PHARM INC.
 PA Baker BF, Cowser LM;
 PI WPI; 2000-105333/09.
 XX Antisense inhibition of tumor necrosis factor type 1 expression for
 PT diagnosis, treatment and prevention of disease, particularly tumors.
 PS Example 10; Col 25; 34pp; English.

CC The invention provides antisense compounds targeted to human tumour
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
 CC can be used in a method of inhibiting the expression of TNFR1 human cells
 CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
 XX
 SQ Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTCCTTGGCTTTG 923
 DB 18 CATTTCCTTGGCTTTG 1

RESULT 25
 AAZ48537/C
 ID AAZ48537 standard; DNA; 18 BP.
 XX AC
 AC AAZ48537;
 DT 31-MAR-2000 (first entry)
 XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18930.
 DE Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
 KW inflammation; tumour formation; TNFR1; anticancer; ss.
 XX

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OS Synthetic.
OS Homo sapiens.
XX US6007995-A.
XX PD 28-DEC-1999.
XX PF 26-JUN-1998; 98US-00106038.
XX PR 26-JUN-1998; 98US-00106038.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsert LM;
XX WPI; 2000-105333/09.
XX Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX Example 10; Col 25; 34pp; English.
XX The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 4 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1098 CACCGTGGCTTCAGTCC 1115
DB 18 CACCGTGGCTTCAGTCC 1
RESULT 26
AAZ48538/c
ID AAZ48538 standard; DNA; 18 BP.
XX AC AAZ48538;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18931.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18931.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX PF 26-JUN-1998; 98US-00106038.
XX PR 26-JUN-1998; 98US-00106038.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsert LM;
XX WPI; 2000-105333/09.
XX The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 4 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1098 CACCGTGGCTTCAGTCC 1115
DB 18 CACCGTGGCTTCAGTCC 1
RESULT 26
AAZ48538/c
ID AAZ48538 standard; DNA; 18 BP.
XX AC AAZ48538;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18932.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX PF 26-JUN-1998; 98US-00106038.
XX PR 26-JUN-1998; 98US-00106038.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsert LM;
XX WPI; 2000-105333/09.
XX The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 4 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1113 TCCCGTCCCGTCCAGTCCAC 1130
DB 18 TCCCGTCCCGTCCAGTCCAC 1
RESULT 27
AAZ48539/c
ID AAZ48539 standard; DNA; 18 BP.
XX AC AAZ48539;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18932.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX PF 26-JUN-1998; 98US-00106038.
XX PR 26-JUN-1998; 98US-00106038.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsert LM;
XX WPI; 2000-105333/09.
XX Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX Example 10; Col 25; 34pp; English.
XX The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 4 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1113 TCCCGTCCCGTCCAGTCCAC 1130
DB 18 TCCCGTCCCGTCCAGTCCAC 1

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XX SQ Sequence 18 BP; 5 A; 2 C; 8 G; 3 T; 0 U; 0 Other;
      Query Match      0.8%; Score 18; DB 1; Length 18;
      Best Local Similarity 100.0%; Pred. No. 20;
      Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1118 TGCCCGAGTTCACCTTCA 1135
DB 18 TGCCCGAGTTCACCTTCA 1

RESULT 28
AAZ48544/c
ID AAZ48544 standard; DNA; 18 BP.
XX
AC AAZ48544;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18933.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
DR WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 4 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
      Query Match      0.8%; Score 18; DB 1; Length 18;
      Best Local Similarity 100.0%; Pred. No. 20;
      Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1127 CCACCTTCACCTCCAGCT 1144
DB 18 CCACCTTCACCTCCAGCT 1

RESULT 30
AAZ48534/c
ID AAZ48534 standard; DNA; 18 BP.
XX
AC AAZ48534;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18927.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX

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PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
XX WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumor
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1, ultimately modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the function of nucleic acid
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumor formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 7 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
CC The invention provides antisense compounds targeted to human tumor
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1, ultimately modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the function of nucleic acid
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumor formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 7 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 992 TTGTTTGTGGGAATCGA 1009
DB 18 TTGTTTGTGGGAATCGA 1
XX
RESULT 31
AAZ48541/C
ID AAZ48541 standard; DNA; 18 BP.
XX
AC AAZ48541;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 19934.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
XX WPI; 2000-105333/09.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
XX WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Claim 1; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumor

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```

CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1, ultimately modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the function of nucleic acid
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumor formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 5 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1162 GACTGTCCCACTTTGCG 1179
DB 18 GACTGTCCCACTTTGCG 1
XX
RESULT 32
AAZ48527/C
ID AAZ48527 standard; DNA; 18 BP.
XX
AC AAZ48527;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18920.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
XX WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumor
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1, ultimately modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the function of nucleic acid
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumor formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX

```

```
QY      873 GGACTCAGGCACACAGT 890
Db      18 GGACTCAGGCACACAGT 1

RESULT 33
AAZ48532/c
ID AAZ48532 standard; DNA; 18 BP.
XX
AC AAZ48532;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18925.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM;
XX
DR WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      935 TCCTCTTCATGTGTTAA 952
Db      18 TCCTCTTCATGTGTTAA 1

RESULT 34
AAZ48526/c
ID AAZ48526 standard; DNA; 18 BP.
XX
AC AAZ48526;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18919.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
```

```
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM;
XX
DR WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 5 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      845 CCCAGATTGAGAATGTTA 862
Db      18 CCCAGATTGAGAATGTTA 1

RESULT 35
AAZ48529/c
ID AAZ48529 standard; DNA; 18 BP.
XX
AC AAZ48529;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18922.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM;
```

XX WPI; 2000-105333/09.
XX Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX Example 10; Col 25; 34pp; English.
XX The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 911 TCCTTGGCTCTTGGCTTT 928
Db 18 TCCTTGGCTCTTGGCTTT 1
RESULT 36
AAZ48543/c
ID AAZ48543 standard; DNA; 18 BP.
XX AC
XX AAZ48543;
XX 31-MAR-2000 (first entry)
XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18936.
XX Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX Synthetic.
OS Homo sapiens.
XX US6007995-A.
XX 28-DEC-1999.
XX 26-JUN-1998; 98US-00106038.
XX 26-JUN-1998; 98US-00106038.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowsett LM;
XX WPI; 2000-105333/09.
XX Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX Example 10; Col 25; 34pp; English.
XX The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA

CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 2 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1269 TCAGAGTGGGAGGACAG 1286
Db 18 TCAGAGTGGGAGGACAG 1
RESULT 37
AAZ48523/c
ID AAZ48523 standard; DNA; 18 BP.
XX AC
XX AAZ48523;
XX 31-MAR-2000 (first entry)
XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18916.
XX Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX Synthetic.
OS Homo sapiens.
XX US6007995-A.
XX 28-DEC-1999.
XX 26-JUN-1998; 98US-00106038.
XX 26-JUN-1998; 98US-00106038.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowsett LM;
XX WPI; 2000-105333/09.
XX Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX Example 10; Col 25; 34pp; English.
XX The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 796 TCCTGTAGTACTGTAAG 813
Db 18 TCCTGTAGTACTGTAAG 1
RESULT 38
AAZ48536/c

XX The invention provides antisense compounds targeted to human tumour
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
 CC can be used in a method of inhibiting the expression of TNFR1 human cells
 CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
 XX
 SQ Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 732 GGAGAAACAGACACCGT 749
 DB 18 GGAGAAACAGACACCGT 1

RESULT 41
 AAZ48531/c
 ID AAZ48531 standard; DNA; 18 BP.
 XX
 AC AAZ48531;
 XX
 DT 31-MAR-2000 (first entry)
 XX
 DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18924.
 XX
 DE Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
 KW inflammation; tumour formation; TNFR1; anticancer; ss.
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN US6007995-A.
 XX
 PD 28-DEC-1999.
 XX
 PF 26-JUN-1998; 98US-00106038.
 XX
 PR 26-JUN-1998; 98US-00106038.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Baker BF, Cowsett LM;
 XX
 WPI; 2000-105333/09.
 XX
 PT Antisense inhibition of tumor necrosis factor type 1 expression for
 PT diagnosis, treatment and prevention of disease, particularly tumors.
 XX
 PS Example 10; Col 25; 34pp; English.

The invention provides antisense compounds targeted to human tumour
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
 CC can be used in a method of inhibiting the expression of TNFR1 human cells
 CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
 XX
 SQ Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 732 GGAGAAACAGACACCGT 749
 DB 18 GGAGAAACAGACACCGT 1

RESULT 42
 AAZ48530/c
 ID AAZ48530 standard; DNA; 18 BP.
 XX
 AC AAZ48530;
 XX
 DT 31-MAR-2000 (first entry)
 XX
 DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18923.
 XX
 DE Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
 KW inflammation; tumour formation; TNFR1; anticancer; ss.
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN US6007995-A.
 XX
 PD 28-DEC-1999.
 XX
 PF 26-JUN-1998; 98US-00106038.
 XX
 PR 26-JUN-1998; 98US-00106038.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Baker BF, Cowsett LM;
 XX
 WPI; 2000-105333/09.
 XX
 PT Antisense inhibition of tumor necrosis factor type 1 expression for
 PT diagnosis, treatment and prevention of disease, particularly tumors.
 XX
 PS Example 10; Col 25; 34pp; English.

The invention provides antisense compounds targeted to human tumour
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
 CC can be used in a method of inhibiting the expression of TNFR1 human cells
 CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
 XX
 SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCATTG 946
 DB 18 TATCCCTCTCTTCATTG 1

RESULT 43
 AAZ485708/c
 ID AAZ485708 standard; DNA; 18 BP.
 XX
 AC AAZ485708;
 XX
 DT 03-JAN-2002 (first entry)
 XX
 DE PCR primer used to amplify p55 extracellular domain DNA.

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCATTG 946
 DB 18 TATCCCTCTCTTCATTG 1

RESULT 42
 AAZ48530/c
 ID AAZ48530 standard; DNA; 18 BP.
 XX
 AC AAZ48530;
 XX
 DT 31-MAR-2000 (first entry)
 XX
 DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18923.
 XX
 DE Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
 KW inflammation; tumour formation; TNFR1; anticancer; ss.
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN US6007995-A.
 XX
 PD 28-DEC-1999.
 XX
 PF 26-JUN-1998; 98US-00106038.
 XX
 PR 26-JUN-1998; 98US-00106038.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Baker BF, Cowsett LM;
 XX
 WPI; 2000-105333/09.
 XX
 PT Antisense inhibition of tumor necrosis factor type 1 expression for
 PT diagnosis, treatment and prevention of disease, particularly tumors.
 XX
 PS Example 10; Col 25; 34pp; English.

The invention provides antisense compounds targeted to human tumour
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
 CC can be used in a method of inhibiting the expression of TNFR1 human cells
 CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
 XX
 SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 921 TTGCGCTTTATCCCTCT 938
 DB 18 TTGCGCTTTATCCCTCT 1

RESULT 43
 AAZ485708/c
 ID AAZ485708 standard; DNA; 18 BP.
 XX
 AC AAZ485708;
 XX
 DT 03-JAN-2002 (first entry)
 XX
 DE PCR primer used to amplify p55 extracellular domain DNA.

XX Human; tumour necrosis factor-alpha; TNF-alpha; chimeric antibody;
 KW immunoglobulin; inflammation; cancer; cachexia; sepsis; endotoxemic shock;
 KW infection; chronic inflammatory disease; auto-immune disease; malignancy;
 KW neurodegenerative disease; Crohn's disease; rheumatoid arthritis;
 KW vascular endothelial growth factor; VEGF; VEGF-mediated disease;
 KW PCR primer; ss.
 XX Unidentified.
 OS Unidentified.
 XX US2001027249-A1.
 XX 04-OCT-2001.
 XX 08-JAN-2001; 2001US-00756301.
 XX 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00104006.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 XX (CENZ) CENTOCOR INC.
 PA Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel S;
 PI WPI; 2001-615872/71.
 XX New chimeric antibody binding an epitope specific for human tumor
 PT necrosis factor alpha useful in treatment and diagnosis of tumor necrosis
 PT factor alpha related conditions e.g. Crohn's disease.
 XX Example 26; Page 51; 93pp; English.
 XX PCR primers A165707-08 were used to amplify DNA encoding the
 CC extracellular domain of p55. The amplified fragment was used to produce
 CC p55 and Ig fusion proteins, in the course of the invention. The
 CC specification describes chimeric antibodies which bind to epitopes of
 CC human tumour necrosis factor (TNF)-alpha. Chimeric antibodies of the
 CC invention comprise at least part of a human immunoglobulin constant
 CC region and at least part of a non-human immunoglobulin variable region.
 CC The chimeric antibodies are useful in vivo diagnosis and therapy of TNF-
 CC alpha-mediated pathologies and conditions. They can also neutralize human
 CC TNF-alpha under physiological conditions. This is useful as TNF is known
 CC to be involved in e.g. pro-inflammatory actions, wasting associated with
 CC cancer and other diseases (cachexia), gram-negative sepsis and endotoxemic
 CC shock. Antibodies can be used to treat and/or diagnose bacterial,
 CC parasitic or viral infections, chronic inflammatory diseases, auto-immune
 CC diseases, malignancies and neurodegenerative diseases (such as Crohn's
 CC disease and rheumatoid arthritis). As inhibition or antagonism of TNF
 CC also decreases the expression of vascular endothelial growth factor
 CC (VEGF), the antibodies are also useful to treat VEGF-mediated diseases
 XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 835 TTGTGCTACCCAGATT 852
 Db 18 TTGTGCTACCCAGATT 1
 RESULT 44
 AAD18201/c
 ID AAD18201 standard; DNA; 18 BP.

XX AAD18201;
 AC 18-DEC-2001 (first entry)
 DT p55 heavy chain fusion DNA construct amplifying primer #2.
 DE Human; tumour necrosis factor; antifungal; antiviral; leukaemia;
 KW antiparasitic; immune disorder; autoimmune disorder; infection;
 KW systemic lupus erythematosus; rheumatoid arthritis; antibacterial;
 KW inflammatory disease; ulcerative colitis; neurodegenerative disease;
 KW multiple sclerosis; cerebellar disorder; alcohol-induced hepatitis;
 KW lymphoma; mouse; anti-TNF antibody; light chain variable region;
 KW chimeric; TNF alpha; PCR primer; ss.
 XX Unidentified.
 OS US6284471-B1.
 XX 04-SEP-2001.
 XX 04-FEB-1994; 94US-00192093.
 XX 18-MAR-1991; 91US-00670827.
 PR 18-MAR-1992; 92US-00853606.
 PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00104006.
 PR 02-FEB-1993; 93US-00013413.
 XX (UYNY-) UNIV NEW YORK MEDICAL CENT.
 PA (CENZ) CENTOCOR INC.
 PI Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel SA;
 XX WPI; 2001-595467/57.
 DR Chimeric anti-tumor necrosis factor (TNF) antibodies useful for
 PT diagnosing or treating TNF-associated pathologies or conditions, e.g.
 PT chronic and acute immune, autoimmune disorders, and microbial infections.
 XX Example 24; Col 82; 87pp; English.
 PS The invention relates to chimeric anti-tumour necrosis factor (TNF)
 CC antibodies. These chimeric antibodies comprises two light chains and two
 CC heavy chains, each of the chains comprising at least part of a human Ig
 CC immunoglobulin (Ig) constant region and at least part of a non-human Ig
 CC variable region, where the antibodies are capable of binding an epitope
 CC specific for human TNF-alpha. Anti-TNF antibodies or peptides may be used
 CC in research, therapeutic and diagnostic methods, specifically for
 CC diagnosing and/or treating animals or human having pathologies or
 CC conditions associated with the presence of a substance reactive with an
 CC anti-TNF antibody. TNF-related pathologies include acute and chronic
 CC immune and autoimmune disorders (e.g. systemic lupus erythematosus,
 CC rheumatoid arthritis), infections (e.g. bacterial, viral, fungal or
 CC parasitic infections), inflammatory diseases (e.g. ulcerative colitis,
 CC Crohn's pathology), neurodegenerative diseases (e.g. multiple sclerosis,
 CC chorea or senile chorea, disorders of the basal ganglia or cerebellar
 CC disorders), malignant pathologies (e.g. leukaemia, lymphomas), or alcohol
 CC -induced hepatitis. The anti-TNF peptide or antibodies may also be used
 CC for immunoassays, which detect or quantitate TNF or anti-TNF antibodies.
 CC The present sequence is a PCR primer used to amplify p55 TNF receptor
 CC heavy chain fusion DNA construct
 XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 835 TTGTGCTACCCAGATT 852
 Db 18 TTGTGCTACCCAGATT 1

RESULT 45
AAH78601/c
ID AAH78601 standard; DNA; 18 BP.
XX
AC AAH78601;
XX
DT 10-DEC-2001 (first entry)
XX
DE PCR primer used to amplify DNA encoding p55 extracellular domain.
XX
DE Human; tumour necrosis factor; TNF; anti-TNF antibody; infection; sepsis;
KW cachexia; acquired immunodeficiency syndrome; AIDS; septic shock;
KW chronic inflammatory disease; disseminated intravascular coagulation;
KW atherosclerosis; ulcerative colitis; chronic inflammatory bowel disease;
KW autoimmune disease; rheumatoid arthritis; diabetes mellitus;
KW graft versus host disease; Grave's disease; alcohol-induced hepatitis;
KW malignancy; neurodegenerative disease; multiple sclerosis;
KW demyelinating disease; acute transverse myelitis; p55;
KW vascular endothelial growth factor-mediated disease;
KW VEGF-mediated disease; PCR primer; ss.
XX
OS Unidentified.
XX
XX US6277969-B1.
XX
XX 21-AUG-2001.
XX
XX 12-AUG-1998; 98US-00133119.
XX
PR 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
PR 04-FEB-1994; 94US-00192861.
PR 18-OCT-1994; 94US-00324799.
PR 11-DEC-1995; 95US-00570674.
XX
XX (UNY) UNIV NEW YORK STATE.
PA (CENZ) CENTOCOR INC.
PA (UNY-) UNIV NEW YORK MEDICAL CENT.
XX
PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
XX WPI; 2001-588928/66.
XX
XX New nucleic acid molecule encoding heavy or light chain variable regions
XX of anti-tumor necrosis factor antibody, useful for alleviating symptoms
XX or pathologies involving tumor necrosis factor.
XX
XX Example 26; Col 92; 94pp; English.
XX
XX The specification describes anti-tumour necrosis factor (TNF) antibodies.
XX The anti-TNF antibody is useful for alleviating symptoms or pathologies
XX involving TNF, such as bacterial, viral or parasitic infections (e.g.
XX sepsis, cachexia, acquired immunodeficiency syndrome (AIDS) and septic
XX shock), chronic inflammatory diseases (disseminated intravascular
XX coagulation, atherosclerosis, ulcerative colitis and chronic inflammatory
XX bowel disease), autoimmune diseases (e.g. rheumatoid arthritis, diabetes
XX mellitus, graft versus host disease and Grave's disease), alcohol-induced
XX hepatitis, malignancies and neurodegenerative diseases (e.g. multiple
XX sclerosis, demyelinating diseases and acute transverse myelitis). The
XX anti-TNF antibody is also useful in the treatment of vascular endothelial
XX growth factor (VEGF)-mediated diseases. PCR primers AAH78600-01 were used
XX to amplify DNA encoding the p55 extracellular domain. p55 is a TNF
XX receptor, and the amplified fragment was used to construct p55/Ig fusion
XX proteins, in the course of the invention
XX
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 835 TTGTGCTACCCAGATT 852
Db 18 TTGTGCTACCCAGATT 1
RESULT 46
ABS54265/c
ID ABS54265 standard; DNA; 18 BP.
XX
AC ABS54265;
XX
DT 28-NOV-2002 (first entry)
XX
DE Human p55 heavy/light chain cDNA, PCR primer.
XX
XX Human; tumour necrosis factor-alpha; TNFalpha; anti-TNF antibody;
KW anti-TNF peptide; neurodegenerative disease; multiple sclerosis;
KW acquired immunodeficiency syndrome; AIDS; demyelinating disease;
KW acute transverse myelitis; extrapyramidal disorder; lesion;
KW cerebellar disorder; basal ganglia disorder; Huntington's chorea;
KW movement disorder; senile chorea; Parkinson's disease; spinal ataxia;
KW progressive supranuclear palsy; spinocerebellar degeneration;
KW systemic disorder; neurogenic muscular atrophy; Down's Syndrome;
KW amyotrophic lateral sclerosis; Alzheimer's disease; chronic alcoholism;
KW Creutzfeldt-Jakob disease; Hallervorden-Spatz disease; neuroleptic;
KW neurotropic; neuroprotective; antiparkinsonian; p55; heavy chain;
KW light chain; PCR; primer; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX US2002106372-A1.
XX
XX 08-AUG-2002.
XX
XX 18-JAN-2001; 2001US-00766535.
XX
PR 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
PR 04-FEB-1994; 94US-00192861.
PR 18-OCT-1994; 94US-00324799.
PR 11-DEC-1995; 95US-00570674.
PR 12-AUG-1998; 98US-00133119.
XX
XX (CENZ) CENTOCOR INC.
XX
XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
XX WPI; 2002-706216/76.
XX
XX Treating a neurodegenerative disease, especially multiple sclerosis,
XX comprises administering an anti-tumor necrosis factor monoclonal antibody
XX or its fragment.
XX
XX Example 26; Page 52; 95pp; English.
XX
XX The present invention relates to anti-tumour necrosis factor (TNF)
XX antibodies, and anti-TNF peptides, which are specific for human tumour
XX necrosis factor-alpha (TNFalpha). Methods of producing and using the anti-
XX -TNF antibodies and anti-TNF peptides are also disclosed. The anti-TNF
XX antibodies, anti-TNF peptides and methods of the invention are useful for
XX treating human neurodegenerative diseases (e.g. multiple sclerosis,
XX acquired immunodeficiency syndrome (AIDS) dementia complex, a
XX demyelinating disease, acute transverse myelitis, an extrapyramidal

CC disorder, a cerebellar disorder, a lesion of the corticospinal system, a
 CC disorder of the basal ganglia, a hyperkinetic movement disorder, a
 CC Huntington's chorea, senile chorea, a drug-induced movement disorder, a
 CC hypokinetic movement disorder, Parkinson's disease, progressive
 CC supranuclear palsy, a structural lesion of the cerebellum, a
 CC spinocerebellar degeneration, spinal ataxia, Friedreich's ataxia, a
 CC cerebellar cortical degeneration, a multiple systems degeneration, a
 CC systemic disorder, Refsum's disease, abetalipoproteinaemia, ataxia
 CC telangiectasia, a mitochondrial multi-system disorder, demyelinating core
 CC disorder, acute transverse myelitis, a disorder of the motor unit, a
 CC neurogenic muscular atrophy, anterior horn cell degeneration, amyotrophic
 CC lateral sclerosis, infantile spinal muscular atrophy, juvenile spinal
 CC muscular atrophy, Alzheimer's disease, Down's Syndrome, a diffuse Lewy
 CC body disease, senile dementia of Lewy body type, Wernicke-Korsakoff
 CC syndrome, chronic alcoholism, Creutzfeldt-Jakob disease, subacute
 CC sclerosing panencephalitis, Hallervorden-Spatz disease, or dementia
 CC pugilistica). The present sequence represents a PCR primer used to
 CC amplify human p55 heavy and light chain cDNAs in the examples of the
 CC present invention

XX
 SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DE 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 835 TTGTGCTACCCAGATT 852

Db 18 TTGTGCTACCCAGATT 1

RESULT 47

ABT05021/c

ID ABT05021 standard; DNA; 18 BP.

XX AC ABT05021;

XX DT 11-OCT-2002 (first entry)

XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 51.

XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX human; ds.

XX OS Homo sapiens.

XX PN WO200248168-A1.

XX PD 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;

XX DR WPI; 2002-583481/62.

XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition

XX PS Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition

CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DE 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 807 CTGTAGAAAAAGCCTGGA 824

Db 18 CTGTAGAAAAAGCCTGGA 1

RESULT 48

ABT05032/c

ID ABT05032 standard; DNA; 18 BP.

XX AC ABT05032;

XX DT 11-OCT-2002 (first entry)

XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 62.

XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX human; ds.

XX OS Homo sapiens.

XX PN WO200248168-A1.

XX PD 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;

XX DR WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumour
 XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
 XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DE 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 1075 AGTCCCACTCCAGGCTTC 1092
Db 18 AGTCCCACTCCAGGCTTC 1

RESULT 49
ABT05034/c
ID ABT05034 standard; DNA; 18 BP.
XX
AC ABT05034;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 64.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 10; Page 45; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 4 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1113 TCCCGTGCCCACTTCAC 1130
Db 18 TCCCGTGCCCACTTCAC 1

RESULT 50
ABT05037/c
ID ABT05037 standard; DNA; 18 BP.
XX
AC ABT05037;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 137.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 10; Page 45; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 5 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1162 GACTGTCCCACTTCGCG 1179
Db 18 GACTGTCCCACTTCGCG 1

RESULT 51
ABT05107/c
ID ABT05107 standard; DNA; 18 BP.
XX
AC ABT05107;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 137.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 10; Page 45; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 5 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowser LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 7 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 992 TTGTTTGTGGGAATCGA 1009
DB 18 TTGTTTGTGGGAATCGA 1
RESULT 52
ABT05108/c
ID ABT05108 standard; DNA; 18 BP.
XX
XX ABT05108;
XX
XX 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 138.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
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PS Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 3 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1222 CCCATCCTTGGCAGACC 1239
DB 18 CCCATCCTTGGCAGACC 1
RESULT 53
ABT05109/c
ID ABT05109 standard; DNA; 18 BP.
XX
XX ABT05109;
XX
XX 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 139.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
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CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 1 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1270 CAGAAGTGGGAGGACAGC 1287
Db 18 CAGAAGTGGGAGGACAGC 1

RESULT 54
ABT05026/c
ID ABT05026 standard; DNA; 18 BP.
XX AC ABT05026;
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 56.
XX DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX KW human; ds.
XX OS Homo sapiens.
XX PN WO200248168-Al.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX PS WPI; 2002-583481/62.
XX DR Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 10; Page 45; 121pp; English.
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
XX CC length targeted to nucleic acid molecule encoding tumour necrosis factor
XX CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX CC TNFR1. The antisense compound is useful for inhibiting the expression of
XX CC TNFR1 in cells or tissues. The antisense compound is also useful for
XX CC treating an animal (preferably human) having a disease or condition
XX CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX CC the expression of TNFR1. The antisense compound is useful for
XX CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX CC This polynucleotide sequence represents a human oligonucleotide relating
XX CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 921 TTGCCTTTTATCCCTCCT 938
Db 18 TTGCCTTTTATCCCTCCT 1

RESULT 55
ABT05029/c
ID ABT05029 standard; DNA; 18 BP.
XX AC ABT05029;
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 59.
XX DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX KW human; ds.
XX OS Homo sapiens.
XX PN WO200248168-Al.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX PS WPI; 2002-583481/62.
XX DR Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 10; Page 45; 121pp; English.
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
XX CC length targeted to nucleic acid molecule encoding tumour necrosis factor
XX CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX CC TNFR1. The antisense compound is useful for inhibiting the expression of
XX CC TNFR1 in cells or tissues. The antisense compound is also useful for
XX CC treating an animal (preferably human) having a disease or condition
XX CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX CC the expression of TNFR1. The antisense compound is useful for
XX CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX CC This polynucleotide sequence represents a human oligonucleotide relating
XX CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 952 ATGTATCGCTACCAACGG 969
Db 18 ATGTATCGCTACCAACGG 1

RESULT 56
ABT05081/c
ID ABT05081 standard; DNA; 18 BP.
XX AC ABT05081;
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 111.
XX DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX KW human; ds.

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XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX DR WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 727 TGCAGGAGAAACAGAAC 744
Db 18 TGCAGGAGAAACAGAAC 1
|||||
RESULT 57
ABT05103/c
ID ABT05103 standard; DNA; 18 BP.
XX AC ABT05103;
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 133.
XX DE
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX DR WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 727 TGCAGGAGAAACAGAAC 744
Db 18 TGCAGGAGAAACAGAAC 1
|||||
RESULT 58
ABT05086/c
ID ABT05086 standard; DNA; 18 BP.
XX AC ABT05086;
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 116.
XX DE
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX DR WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 952 ATGTATCGCTACCAACGG 969
Db 18 ATGTATCGCTACCAACGG 1
|||||

```

CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX
 SQ Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 781 GAAACGAGTGCTCTCC 798
 Db 18 GAAACGAGTGCTCTCC 1
 RESULT 59
 ABT05088/c
 ID ABT05088 standard; DNA; 18 BP.
 XX
 AC ABT05088;
 XX
 DT 11-OCT-2002 (first entry)
 XX
 DE TNFR1 expression modulation related antisense oligo SEQ ID No 118.
 XX
 KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200248168-A1.
 XX
 PD 20-JUN-2002.
 XX
 PF 22-OCT-2001; 2001WO-US051224.
 XX
 PR 24-OCT-2000; 2000US-00695451.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Baker BF, Cowsett LM, Zhang H, Dean NM;
 XX
 DR WPI; 2002-583481/62.
 XX
 CC Novel antisense compound targeted to nucleic acid molecule encoding tumor
 CC necrosis factor receptor 1 (TNFR1), useful for treating humans having
 CC disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 CC
 PS Example 18; Page 56; 121pp; English.
 XX
 CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX
 SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 805 AACTGTAAAGAAAGCCTG 822
 Db 18 AACTGTAAAGAAAGCCTG 1
 RESULT 60
 ABT05091/c
 ID ABT05091 standard; DNA; 18 BP.
 XX
 AC ABT05091;
 XX
 DT 11-OCT-2002 (first entry)
 XX
 DE TNFR1 expression modulation related antisense oligo SEQ ID No 121.
 XX
 KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200248168-A1.
 XX
 PD 20-JUN-2002.
 XX
 PF 22-OCT-2001; 2001WO-US051224.
 XX
 PR 24-OCT-2000; 2000US-00695451.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Baker BF, Cowsett LM, Zhang H, Dean NM;
 XX
 DR WPI; 2002-583481/62.
 XX
 CC Novel antisense compound targeted to nucleic acid molecule encoding tumor
 CC necrosis factor receptor 1 (TNFR1), useful for treating humans having
 CC disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 CC
 PS Example 18; Page 56; 121pp; English.
 XX
 CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX
 SQ Sequence 18 BP; 10 A; 4 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 903 GGTCAATTTCTTTGGTCT 920
 Db 18 GGTCAATTTCTTTGGTCT 1
 RESULT 61
 ABT05098/c
 ID ABT05098 standard; DNA; 18 BP.
 XX
 AC ABT05098;

XX DT 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 128.
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 OS Homo sapiens.
 XX WO200248168-A1.
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowseert LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX
 SQ Sequence 18 BP; 9 A; 0 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 925 CTTTATCCCTCCTCTTC 942
 Db 18 CTTTATCCCTCCTCTTC 1
 RESULT 62
 ABT05093/c
 ID ABT05093 standard; DNA; 18 BP.
 XX
 AC ABT05093;
 XX 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 123.
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX Homo sapiens.
 OS
 XX WO200248168-A1.
 PN
 XX

PD 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowseert LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX
 SQ Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 909 TTCTTTGGCTCTTGCT 926
 Db 18 TTCTTTGGCTCTTGCT 1
 RESULT 63
 ABT05017/c
 ID ABT05017 standard; DNA; 18 BP.
 XX
 AC ABT05017;
 XX 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 47.
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX Homo sapiens.
 OS
 XX WO200248168-A1.
 PN
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowseert LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor

PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX
 XX Example 10; Page 45; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 732 GGAGAAACAGAACCCGT 749
 Db 18 GGAGAAACAGAACCCGT 1

RESULT 64

ABT05035/c
 ID ABT05035 standard; DNA; 18 BP.

XX AC ABT05035;

DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 65.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowsett LM, Zhang H, Dean NM;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
 XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 10; Page 45; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting

CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX Sequence 18 BP; 5 A; 2 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1118 TGCCAGTTCACCTTCA 1135
 Db 18 TGCCAGTTCACCTTCA 1

RESULT 65

ABT05084/c
 ID ABT05084 standard; DNA; 18 BP.

XX AC ABT05084;

DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 114.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowsett LM, Zhang H, Dean NM;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
 XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 18; Page 56; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX Sequence 18 BP; 3 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 775 CTAGAGAAACGAGTCT 792
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Db      18 CTAAGAGAAAAACGAGTGT 1
RESULT 66
ABT05100/c
ID      ABT05100 standard; DNA; 18 BP.
XX
AC      ABT05100;
XX
DT      11-OCT-2002 (first entry)
XX
DE      TNFR1 expression modulation related antisense oligo SEQ ID No 130.
XX
KW      Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW      TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW      human; ds.
XX
OS      Homo sapiens.
XX
PN      WO200248168-A1.
XX
PD      20-JUN-2002.
XX
PF      22-OCT-2001; 2001WO-US051224.
XX
PR      24-OCT-2000; 2000US-00695451.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Baker BF, Cowser LM, Zhang H, Dean NM;
PI      WPI; 2002-583481/62.
XX
PT      Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT      necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT      disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS      Example 18; Page 56; 121pp; English.
XX
CC      The invention relates to an antisense compound 8 to 30 nucleotides in
CC      length targeted to nucleic acid molecule encoding tumour necrosis factor
CC      receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC      TNFR1. The antisense compound is useful for inhibiting the expression of
CC      TNFR1 in cells or tissues. The antisense compound is also useful for
CC      treating an animal (preferably human) having a disease or condition
CC      associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC      injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC      the expression of TNFR1. The antisense compound is useful for
CC      diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC      This polynucleotide sequence represents a human oligonucleotide relating
CC      to the TNFR1 of the invention
XX
SQ      Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match      0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      931 TCCCTCCTCTTCATGTGT 948
DB      18 TCCCTCCTCTTCATGTGT 1
          |||||
RESULT 67
ABT05105/c
ID      ABT05105 standard; DNA; 18 BP.
XX
AC      ABT05105;
XX
DT      11-OCT-2002 (first entry)
XX
DE      TNFR1 expression modulation related antisense oligo SEQ ID No 135.
XX

KW      Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW      TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW      human; ds.
XX
OS      Homo sapiens.
XX
PN      WO200248168-A1.
XX
PD      20-JUN-2002.
XX
PF      22-OCT-2001; 2001WO-US051224.
XX
PR      24-OCT-2000; 2000US-00695451.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Baker BF, Cowser LM, Zhang H, Dean NM;
PI      WPI; 2002-583481/62.
XX
PT      Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT      necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT      disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS      Example 18; Page 56; 121pp; English.
XX
CC      The invention relates to an antisense compound 8 to 30 nucleotides in
CC      length targeted to nucleic acid molecule encoding tumour necrosis factor
CC      receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC      TNFR1. The antisense compound is useful for inhibiting the expression of
CC      TNFR1 in cells or tissues. The antisense compound is also useful for
CC      treating an animal (preferably human) having a disease or condition
CC      associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC      injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC      the expression of TNFR1. The antisense compound is useful for
CC      diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC      This polynucleotide sequence represents a human oligonucleotide relating
CC      to the TNFR1 of the invention
XX
SQ      Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match      0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      931 TCCCTCCTCTTCATGTGT 948
DB      18 TCCCTCCTCTTCATGTGT 1
          |||||
RESULT 68
ABT05106/c
ID      ABT05106 standard; DNA; 18 BP.
XX
AC      ABT05106;
XX
DT      11-OCT-2002 (first entry)
XX
DE      TNFR1 expression modulation related antisense oligo SEQ ID No 136.
XX
KW      Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW      TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW      human; ds.
XX
OS      Homo sapiens.
XX
PN      WO200248168-A1.
XX
PD      20-JUN-2002.
XX
PF      22-OCT-2001; 2001WO-US051224.
XX
PR      24-OCT-2000; 2000US-00695451.
XX

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The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits.

This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

Sequence 18 BP; 3 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0

Qy 802 AGTAACTGTGGAATC 1
| | | | | | | | | |
Db 18 CATTTGGTGGAATC 1

RESULT 70
ABT05031/c
ID ABT05031 standard; DNA; 18 BP.
XX
AC ABT05031;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID NO 61.
XX
KW Antisense compound; tumor necrosis factor receptor 1; liver disease;
KN hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
PP
PR 24-OCT-2000; 2000US-00695451.
PX
PY (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM, Zhang H, Dean NM;
PS WPI; 2002-583481/62.
XX
DR Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PT Example 10; Page 45; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits.

This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

Sequence 18 BP; 7 A; 5 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0

Qy 990 CATTGTTTTGGGAATC 1007
| | | | | | | | | |
Db 18 CATTTGGTGGAATC 1

RESULT 69
ABT05020/c
ID ABT05020 standard; DNA; 18 BP.
XX
AC ABT05020;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID NO 50.
XX
PW Antisense compound; tumor necrosis factor receptor 1; liver disease;
KN hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
PP
PR 24-OCT-2000; 2000US-00695451.
PX
PY (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM, Zhang H, Dean NM;
PS WPI; 2002-583481/62.
XX
DR Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PT Example 10; Page 45; 121pp; English.
XX

```

SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
  Query Match      0.8%; Score 18; DB 1; Length 18;
  Best Local Similarity 100.0%; Pred. No. 20;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GAAGGAAGTACTACTAAG 1050
Db 18 GAAGGAAGTACTACTAAG 1

RESULT 71
ABT05039/c
ID ABT05039 standard; DNA; 18 BP.
XX
AC ABT05039;
XX
DT 11-OCT-2002 (first entry)
XX
TNFR1 expression modulation related antisense oligo SEQ ID No 69.
XX
Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WC200248168-A1.
XX
PD 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM, Zhang H, Dean NM;
PI WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 2 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
  Query Match      0.8%; Score 18; DB 1; Length 18;
  Best Local Similarity 100.0%; Pred. No. 20;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1269 TCAGAGTGGGAGGACAG 1286
Db 18 TCAGAGTGGGAGGACAG 1

RESULT 72
ABT05040/c
ID ABT05040 standard; DNA; 18 BP.
XX
AC ABT05040;
XX
DT 11-OCT-2002 (first entry)
XX
TNFR1 expression modulation related antisense oligo SEQ ID No 70.
XX
Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WC200248168-A1.
XX
PD 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM, Zhang H, Dean NM;
PI WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 1 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
  Query Match      0.8%; Score 18; DB 1; Length 18;
  Best Local Similarity 100.0%; Pred. No. 20;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1290 CCACAGGCCACAGAGCCT 1307
Db 18 CCACAGGCCACAGAGCCT 1

RESULT 73
ABT05096/c
ID ABT05096 standard; DNA; 18 BP.
XX
AC ABT05096;
XX
DT 11-OCT-2002 (first entry)
XX
TNFR1 expression modulation related antisense oligo SEQ ID No 126.
XX
Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.

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XX WO200248168-A1.
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowsett LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred.No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 919 CTTTGCCCTTTATCCCTC 936
 DB 18 CTTTGCCCTTTATCCCTC 1
 RESULT 74
 ABT05113/c
 ID ABT05113 standard; DNA; 18 BP.
 XX AC ABT05113;
 XX 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 143.
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX Homo sapiens.
 XX OS
 XX WO200248168-A1.
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowsett LM, Zhang H, Dean NM;

DR WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX Sequence 18 BP; 1 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred.No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1291 CACAAGCCACAGAGCCTA 1308
 DB 18 CACAAGCCACAGAGCCTA 1
 RESULT 75
 ABT05028/c
 ID ABT05028 standard; DNA; 18 BP.
 XX AC ABT05028;
 XX 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 58.
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX Homo sapiens.
 XX OS
 XX WO200248168-A1.
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowsett LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 10; Page 45; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for

CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX

SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGGTTAA 952

Db 18 TCCTCTTCATTGGTTAA 1

RESULT 76

ABT05087/c
 ID ABT05087 standard; DNA; 18 BP.

XX AC ABT05087;

XX DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 117.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX human; ds.

XX OS Homo sapiens.

XX PN WO200248168-A1.

XX DT 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowser LM, Zhang H, Dean NM;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 18; Page 56; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 803 GTAACGTGAAGAAAGCC 820

Db 18 GTAACGTGAAGAAAGCC 1

RESULT 77

ABT05094/c

ID ABT05094 standard; DNA; 18 BP.

XX AC ABT05094;

XX DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 124.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX human; ds.

XX OS Homo sapiens.

XX PN WO200248168-A1.

XX DT 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowser LM, Zhang H, Dean NM;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 18; Page 56; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX Sequence 18 BP; 10 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 20;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 915 TGGTCTTTTCCTTTTATC 932

Db 18 TGGTCTTTTCCTTTTATC 1

RESULT 78

ABT05097/c

ID ABT05097 standard; DNA; 18 BP.

XX AC ABT05097;

XX DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 127.
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX Homo sapiens.
 XX WO200248168-A1.
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 PA Baker BF, Cowseert LM, Zhang H, Dean NM;
 PI WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX Sequence 18 BP; 8 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 923 GCCTTTATCCCTCTCT 940
 Db 18 GCCTTTATCCCTCTCT 1
 RESULT 79
 ABT05024/c
 ID ABT05024 standard; DNA; 18 BP.
 XX AC
 XX ABT05024;
 XX 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 54.
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX Homo sapiens.
 XX WO200248168-A1.
 XX 20-JUN-2002.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

PF 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 PA Baker BF, Cowseert LM, Zhang H, Dean NM;
 PI WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 10; Page 45; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 906 CATTTCTTTGGCTCTTG 923
 Db 18 CATTTCTTTGGCTCTTG 1
 RESULT 80
 ABT05027/c
 ID ABT05027 standard; DNA; 18 BP.
 XX AC
 XX ABT05027;
 XX 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 57.
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX Homo sapiens.
 XX WO200248168-A1.
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 PA Baker BF, Cowseert LM, Zhang H, Dean NM;
 PI WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.


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RESULT 83
ABT05082/c
ID ABT05082 standard; DNA; 18 BP.
XX
XX
AC ABT05082;
XX
DT 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 112.
DE
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
OS
XX WO200248168-Al.
PN
XX 20-JUN-2002.
PD
XX
XX 22-OCT-2001; 2001WO-US051224.
PF
XX 24-OCT-2000; 2000US-00695451.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Baker BF, Cowsett LM, Zhang H, Dean NM;
PI WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
PS
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 0 A; 4 C; 5 G; 9 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 729 CCAGGAGAAACAGACAC 746
Db 18 CCAGGAGAAACAGACAC 1
XXXXXXXXXXXXXXXXXXXX
RESULT 84
ABT05085/c
ID ABT05085 standard; DNA; 18 BP.
XX
XX
AC ABT05085;
XX
DT 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 115.
DE
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
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human; ds.
KW
XX
XX Homo sapiens.
OS
XX WO200248168-Al.
PN
XX 20-JUN-2002.
PD
XX
XX 22-OCT-2001; 2001WO-US051224.
PF
XX 24-OCT-2000; 2000US-00695451.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Baker BF, Cowsett LM, Zhang H, Dean NM;
PI WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
PS
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 4 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 779 GAGAAACGAGTGTCT 796
Db 18 GAGAAACGAGTGTCT 1
XXXXXXXXXXXXXXXXXXXX
RESULT 85
ABT05101/c
ID ABT05101 standard; DNA; 18 BP.
XX
XX
AC ABT05101;
XX
DT 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 131.
DE
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
OS
XX WO200248168-Al.
PN
XX 20-JUN-2002.
PD
XX
XX 22-OCT-2001; 2001WO-US051224.
PF
XX 24-OCT-2000; 2000US-00695451.
PR
XX (ISIS-) ISIS PHARM INC.
PA
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RESULT 89

CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 4 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1098 CACCTGGGCTTCAGTCC 1115
 DB 18 CACCTGGGCTTCAGTCC 1

RESULT 93
 ABT05083/c
 ID ABT05083 standard; DNA; 18 BP.
 XX AC ABT05083;
 XX DT 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 113.
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX OS Homo sapiens.
 XX PN WO200248168-A1.
 XX PD 20-JUN-2002.
 XX PF 22-OCT-2001; 2001WO-US051224.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Baker BF, Cowser LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 0 A; 5 C; 4 G; 9 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 731 AGGAGAACAGACACCG 748

DB 18 AGGAGAACAGACACCG 1

RESULT 94
 ABT05023/c
 ID ABT05023 standard; DNA; 18 BP.

XX AC ABT05023;
 XX DT 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 53.
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX OS Homo sapiens.
 XX PN WO200248168-A1.
 XX PD 20-JUN-2002.
 XX PF 22-OCT-2001; 2001WO-US051224.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Baker BF, Cowser LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 10; Page 45; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 873 GGACTCAGGCACACAGT 890
 DB 18 GGACTCAGGCACACAGT 1

RESULT 95
 ABT05025/c
 ID ABT05025 standard; DNA; 18 BP.

XX AC ABT05025;
 XX DT 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 55.


```

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
XX Homo sapiens.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsett LM, Zhang H, Dean NM;
XX
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 911 TCTTTGGTCTTTGCTTT 928
XX 18 TCTTTGGTCTTTGCTTT 1
XX
XX RESULT 96
XX ABT05090/c
XX ID ABT05090 standard; DNA; 18 BP.
XX
XX AC ABT05090;
XX
XX 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 120.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX

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PR 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsett LM, Zhang H, Dean NM;
XX
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 9 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 899 CCTGTGTCATTCTTTG 916
XX 18 CCTGTGTCATTCTTTG 1
XX
XX RESULT 97
XX ABT05099/c
XX ID ABT05099 standard; DNA; 18 BP.
XX
XX AC ABT05099;
XX
XX 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 129.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsett LM, Zhang H, Dean NM;
XX
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX

```

XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 9 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 927 TTTATCCCTCCTCTTCAT 944
DB 18 TTTATCCCTCCTCTTCAT 1
RESULT 98
ABT05018/c
ID ABT05018 standard; DNA; 18 BP.
XX AC
XX ABT05018;
XX 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 48.
DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX Homo sapiens.
OS
XX WO200248168-A1.
PN
XX 20-JUN-2002.
PD
XX 22-OCT-2001; 2001WO-US051224.
PF
XX 24-OCT-2000; 2000US-00695451.
PR (ISIS-) ISIS PHARM INC.
PA Baker BF, Cowsett LM, Zhang H, Dean NM;
PI WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX

XX
SQ Sequence 18 BP; 6 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 786 CGAGTGTGTCCTCCGTAG 803
DB 18 CGAGTGTGTCCTCCGTAG 1
RESULT 99
ABT05089/c
ID ABT05089 standard; DNA; 18 BP.
XX AC
XX ABT05089;
XX 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 119.
DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX Homo sapiens.
OS
XX WO200248168-A1.
PN
XX 20-JUN-2002.
PD
XX 22-OCT-2001; 2001WO-US051224.
PF
XX 24-OCT-2000; 2000US-00695451.
PR (ISIS-) ISIS PHARM INC.
PA Baker BF, Cowsett LM, Zhang H, Dean NM;
PI WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 5 A; 4 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 846 CCAGATTGAGATGTAA 863
DB 18 CCAGATTGAGATGTAA 1
RESULT 100

OS	Homo sapiens.
XX	WO200248168-A1.
PN	20-JUN-2002.
PD	22-OCT-2001; 2001WO-US051224.
PF	24-OCT-2000; 2000US-00695451.
PR	(ISIS-) ISIS PHARM INC.
PB	Baker BF, Cowsett LM, Zhang H, Dean NM;
PI	WPI; 2002-583481/62.
PP	Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
PS	Example 18; Page 56; 121pp; English.
CC	The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
SQ	Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
Query Match	0.8%; Score 18; DB 1; Length 18;
Best Local Similarity	100.0%; Pred. No. 20;
Matches	18; Conservative 0; Mismatches 0; Indels 0; Gaps 0
Oy	1293 CAAGCCACAGAGCCTAGA 1310
Dd	18 CAAGCCACAGAGCCTAGA 1
RESULT 102	
ID	ABT05092/C
XX	ABT05092 standard; DNA; 18 BP.
AC	ABT05092;
XX	11-OCT-2002 (first entry)
DE	TNFR1 expression modulation related antisense oligo SEQ ID No 122.
XX	Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
OS	Homo sapiens.
XX	WO200248168-A1.
PN	20-JUN-2002.
PD	22-OCT-2001; 2001WO-US051224.
PF	24-OCT-2000; 2000US-00695451.
PR	(ISIS-) ISIS PHARM INC.
PB	Baker BF, Cowsett LM, Zhang H, Dean NM;
PI	WPI; 2002-583481/62.
PP	Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
PS	Example 18; Page 56; 121pp; English.
CC	The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
SQ	Sequence 18 BP; 1 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
Query Match	0.8%; Score 18; DB 1; Length 18;
Best Local Similarity	100.0%; Pred. No. 20;
Matches	18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy	1272 GAAGTGCGGAGCAGGC 1289
Dd	18 GAAGTGCGGAGCAGGC 1
RESULT 101	
ID	ABT05114/C
XX	ABT05114 standard; DNA; 18 BP.
AC	ABT05114;
XX	11-OCT-2002 (first entry)
DE	TNFR1 expression modulation related antisense oligo SEQ ID No 144.
XX	Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
OS	Homo sapiens.
XX	WO200248168-A1.
PN	20-JUN-2002.
PD	22-OCT-2001; 2001WO-US051224.
PF	24-OCT-2000; 2000US-00695451.
PR	(ISIS-) ISIS PHARM INC.
PB	Baker BF, Cowsett LM, Zhang H, Dean NM;
PI	WPI; 2002-583481/62.
PP	Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
PS	Example 18; Page 56; 121pp; English.
CC	The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
SQ	Sequence 18 BP; 1 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
Query Match	0.8%; Score 18; DB 1; Length 18;
Best Local Similarity	100.0%; Pred. No. 20;
Matches	18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy	1272 GAAGTGCGGAGCAGGC 1289
Dd	18 GAAGTGCGGAGCAGGC 1
RESULT 101	
ID	ABT05114/C
XX	ABT05114 standard; DNA; 18 BP.
AC	ABT05114;
XX	11-OCT-2002 (first entry)
DE	TNFR1 expression modulation related antisense oligo SEQ ID No 144.
XX	Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
OS	Homo sapiens.
XX	WO200248168-A1.
PN	20-JUN-2002.
PD	22-OCT-2001; 2001WO-US051224.
PF	24-OCT-2000; 2000US-00695451.
PR	(ISIS-) ISIS PHARM INC.
PB	Baker BF, Cowsett LM, Zhang H, Dean NM;
PI	WPI; 2002-583481/62.
PP	Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
PS	Example 18; Page 56; 121pp; English.
CC	The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
SQ	Sequence 18 BP; 1 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
Query Match	0.8%; Score 18; DB 1; Length 18;
Best Local Similarity	100.0%; Pred. No. 20;
Matches	18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy	1272 GAAGTGCGGAGCAGGC 1289
Dd	18 GAAGTGCGGAGCAGGC 1
RESULT 101	
ID	ABT05114/C
XX	ABT05114 standard; DNA; 18 BP.
AC	ABT05114;
XX	11-OCT-2002 (first entry)
DE	TNFR1 expression modulation related antisense oligo SEQ ID No 144.
XX	Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
OS	Homo sapiens.
XX	WO200248168-A1.
PN	20-JUN-2002.
PD	22-OCT-2001; 2001WO-US051224.
PF	24-OCT-2000; 2000US-00695451.
PR	(ISIS-) ISIS PHARM INC.
PB	Baker BF, Cowsett LM, Zhang H, Dean NM;
PI	WPI; 2002-583481/62.
PP	Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 954 GTATGCTACCAACGGTG 971
 |||||
 Db 18 GTATGCTACCAACGGTG 1

RESULT 105
 ABV73805/c
 ID ABV73805 standard; DNA; 18 BP.

XX AC ABV73805;

XX DT 08-JAN-2003 (first entry)

XX DE Human tumour necrosis factor receptor p55 3' PCR primer.

XX KW Tumour necrosis factor; receptor; human; myelodysplastic syndrome;
 XX cytotatic; vaccine; PCR; primer; ss.

XX OS Homo sapiens.

XX PN US2002114805-A1.

XX PD 22-AUG-2002.

XX PF 07-DEC-2001; 2001US-00010229.

XX PR 18-MAR-1991; 91US-00670827.

XX PR 18-MAR-1992; 92US-00853606.

XX PR 11-SEP-1992; 92US-00943852.

XX PR 29-JAN-1993; 93US-00010406.

XX PR 02-FEB-1993; 93US-00013413.

XX PR 04-FEB-1994; 94US-00192093.

XX PR 04-FEB-1994; 94US-00192102.

XX PR 18-OCT-1994; 94US-00192861.

XX PR 11-DEC-1995; 95US-00324799.

XX PR 12-AUG-1998; 98US-00133119.

XX PR 08-JAN-2001; 2001US-00756398.

XX PR 10-AUG-2001; 2001US-00927703.

XX PA (UNYNY-) UNIV NEW YORK MEDICAL CENT.

XX PI Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel S;

XX WPI; 2002-740091/80.

XX DR Treating myelodysplastic syndrome in human, involves administering tumor
 XX necrosis factor-inhibiting amount of an anti-TNF antibody, monoclonal
 XX antibody cA2 or anti-TNF chimeric antibody.

XX PS Example 26; Page 52; 97pp; English.

XX CC The present sequence is that of a 3' primer used in the construction of
 XX tumour necrosis factor (TNF) receptor p55 heavy chain and light chain
 XX fusion constructs. It includes the complement of the p55 Ile-159 codon.
 XX PCR was used to amplify amino acids 3-159 or 2-159 of the p55
 XX extracellular domain. The invention provides claimed methods of treating
 XX a myelodysplastic syndrome using an anti-TNF antibody or a chimeric
 XX antibody comprising variable regions (see ABP54870-71) from murine anti-
 XX TNF monoclonal antibody A2 and a human constant region. The anti-TNF
 XX peptides and antibodies of the invention can be used in the treatment of
 XX TNF-related pathologies such as acute and chronic immune and autoimmune
 XX pathologies, infections, inflammatory diseases, neurodegenerative
 XX diseases, malignant pathologies, and alcohol-induced hepatitis

XX SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTACCCAGATT 852
 |||||
 Db 18 TTGTGCTACCCAGATT 1

RESULT 106

AAI72618/c

ID AAI72618 standard; DNA; 18 BP.

XX AC AAI72618;

XX DT 10-JUN-2002 (first entry)

XX DE p55 fusion protein p55 heavy chain primer #2.

XX KW Human; tumour necrosis factor; TNF; chimeric; antibody; cA2; primer;

XX KW psoriasis; immunoglobulin; G1; amplify; ss.

XX OS Homo sapiens.

XX PN US2002022720-A1.

XX PD 21-FEB-2002.

XX PF 10-AUG-2001; 2001US-00927703.

XX PR 18-MAR-1991; 91US-00670827.

XX PR 18-MAR-1992; 92US-00853606.

XX PR 11-SEP-1992; 92US-00943852.

XX PR 29-JAN-1993; 93US-00010406.

XX PR 02-FEB-1993; 93US-00013413.

XX PR 04-FEB-1994; 94US-00192093.

XX PR 04-FEB-1994; 94US-00192102.

XX PR 18-OCT-1994; 94US-00324799.

XX PR 11-DEC-1995; 95US-00570674.

XX PR 12-AUG-1998; 98US-00133119.

XX PR 08-JAN-2001; 2001US-00756398.

XX PA (UNYNY-) UNIV NEW YORK MEDICAL CENT.

XX PI Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel S;

XX WPI; 2002-255676/30.

XX DR Treating psoriasis in humans comprises administering anti-tumor necrosis
 XX factor (TNF) chimeric antibody cA2, or anti-TNF chimeric antibody which
 XX competitively inhibits binding of TNF to the antibody cA2.

XX PS Example 26; Page 52; 97pp; English.

XX CC The sequences given in AAI72611-19 are primers which were used in the
 XX production of a p55 fusion protein. The fusion protein closely mimics the
 XX structure of naturally rearranged immunoglobulin (Ig) genes. The fusion
 XX proteins may be used in a chimeric antibody for treating psoriasis in
 XX humans. Psoriasis may be treated by administering: (a) anti-tumour
 XX necrosis factor (TNF) chimeric antibody (Ab) which competitively inhibits
 XX binding of TNF to monoclonal chimeric Ab cA2; or (b) anti-TNF chimeric Ab
 XX comprising a human immunoglobulin (Ig) G1 constant region and a non-human
 XX variable region, which binds to an epitope included in amino acids 87 -
 XX 108 or both 59 - 80 and 87 - 108 of a TNF sequence. The cA2 antibody has
 XX potent TNF-inhibiting and/or neutralizing activity. Levels of cA2 as low
 XX as 125 ng/ml completely abolished the toxic activity of TNF. The cA2
 XX exhibited greater TNF-inhibiting activity and/or neutralizing activity
 XX than did the parent murine A2 monoclonal antibody

XX SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY ' 835 TTGTGCTACCCAGATT 852

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTACCCAGATT 852
 18 TTGTGCTACCCAGATT 1

Db 18 TTGTGCTACCCAGATT 1

RESULT 109
 ABX11358/c
 ID ABX11358 standard; DNA; 18 BP.
 XX
 AC ABX11358;
 DT 29-APR-2003 (first entry)

XX Query Match 0.8%; Score 18; DB 1; Length 18;
 XX Best Local Similarity 100.0%; Pred. No. 20;
 XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PCR primer, #8, used to amplify the p55 extracellular domain.

PCR; ss; TNFalpha; humanised antibody; tumour necrosis factor-alpha;
 primer; antigen; constant region; heavy chain; light chain;
 antigen binding region; complementarity determining region; CDR; A2; CA2;
 framework region; cytokine; TNF; pro-inflammatory; tissue injury;
 procoagulant; vascular endothelial cell; neutrophil; lymphocyte;
 platelet activating factor; macrophage; immune disorder; scleroderma;
 autoimmune disorder; rheumatoid arthritis; thyroiditis; diabetes;
 graft versus host disease; Grave's disease; infection; AIDS;
 inflammatory disease; sarcoidosis; chronic inflammatory bowel disease;
 ulcerative colitis; Crohn's disease; atherosclerosis; dementia;
 neurodegenerative disease; multiple sclerosis; Parkinson's disease;
 Alzheimer's disease; cancer; hepatitis; ocular neovascularisation;
 psoriasis; duodenal ulcer; angiogenesis; female reproductive tract;
 immunosuppressive; dermatological; anti-HIV; antiarteriosclerotic;
 neuroprotective; nootropic; cytostatic; gynecological; p55.

XX Unidentified.
 OS Synthetic.
 XX US2002132307-A1.
 XX 19-SEP-2002.
 XX 08-JAN-2001; 2001US-00756161.
 XX 12-AUG-1998; 98US-00133119.
 XX (UUNY) UNIV NEW YORK STATE.
 XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;
 WPI; 2003-237899/23.

XX New humanized anti-TNF antibody with an antigen binding region, useful
 for diagnosing and treating TNF-related pathologies, such as autoimmune
 disorders, bacterial and viral infections, inflammatory diseases, AIDS
 and cancer.

XX Example 26; Page 51; 98pp; English.

XX The invention discloses a new humanised antibody, or its antigen-binding
 fragment, that selectively binds human tumour necrosis factor-alpha
 (TNFalpha), comprising an antigen binding region of non-human origin and
 at least a portion of an antibody of human origin. The antibody consists
 of a constant region heavy or light chain of human origin and an antigen
 binding region, comprising complementarity determining regions (CDRs)
 derived from an antibody of murine origin that binds to human TNF-alpha
 (A2 or CA2), and a framework region derived from a heavy or light chain
 of human origin. Also disclosed is an expression vector comprising a
 fused gene encoding the humanised antibody, or its antigen-binding
 fragment, and the method for preparing it. The cytokine TNF causes pro-
 inflammatory actions which result in tissue injury, such as inducing
 procoagulant activity on vascular endothelial cells, increasing the
 adherence of neutrophils and lymphocytes and stimulating the release of
 platelet activating factor from macrophages, neutrophils and vascular
 endothelial cells. The methods are useful for preparing a humanised

CC antibody, and antigen-binding fragment, and manufacturing a polypeptide.
 CC The methods and compositions are also useful for the diagnosis and
 treatment of TNF-related pathologies, such as acute and chronic immune
 and autoimmune disorders (rheumatoid arthritis, thyroiditis, graft versus
 host disease, scleroderma, diabetes and Grave's disease), bacterial and
 viral infections including AIDS, inflammatory diseases (sarcoidosis,
 chronic inflammatory bowel disease, ulcerative colitis, Crohn's disease,
 and atherosclerosis), neurodegenerative diseases (multiple sclerosis,
 Parkinson's disease, dementia and Alzheimer's disease), cancer,
 hepatitis, ocular neovascularisation, psoriasis, duodenal ulcers and
 angiogenesis of the female reproductive tract. The sequence presented is
 CC a PCR primer which was used to amplify the p55 extracellular domain
 XX
 XX SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

QY 835 TTGTGCTACCCAGATT 852
 Db 18 TTGTGCTACCCAGATT 1

RESULT 110
 ABX11374/c
 ID ABX11374 standard; DNA; 18 BP.
 XX
 AC ABX11374;
 XX
 DT 29-APR-2003 (first entry)

XX Query Match 0.8%; Score 18; DB 1; Length 18;
 XX Best Local Similarity 100.0%; Pred. No. 20;
 XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PCR primer, #7, used to amplify the p55 extracellular domain.

PCR; ss; tumour necrosis factor alpha; TNFalpha; rheumatoid arthritis;
 TNF inhibitor; ankylosis; anti-TNF antibody; CA2; immunoglobulin G1;
 primer; Ig G1; TNF; heavy chain; light chain; antigen binding; CDR;
 complementarity determining region; framework region; cytokine;
 pro-inflammatory; tissue injury; procoagulant; vascular endothelial cell;
 neutrophil; lymphocyte; platelet activating factor; macrophage;
 immune disorder; autoimmune disorder; rheumatoid arthritis; thyroiditis;
 graft versus host disease; scleroderma; diabetes; Grave's disease;
 infection; AIDS; inflammatory disease; ulcerative colitis; Crohn's disease;
 chronic inflammatory bowel disease; neurodegenerative disease; multiple sclerosis;
 atherosclerosis; dementia; Alzheimer's disease; cancer; hepatitis;
 Parkinson's disease; neurodegenerative disease; multiple sclerosis;
 ocular neovascularisation; psoriasis; duodenal ulcer; angiogenesis;
 female reproductive tract; haemodynamic; febrile; allergic episode; p55.

XX Unidentified.
 OS Synthetic.
 XX US2002146419-A1.
 XX 10-OCT-2002.
 XX 10-JAN-2002; 2002US-00044534.
 XX 18-MAR-1991; 91US-00670827.
 XX 18-MAR-1992; 92US-00853606.
 XX 11-SEP-1992; 92US-00943852.
 XX 29-JAN-1993; 93US-00010406.
 XX 02-FEB-1993; 93US-00013413.
 XX 04-FEB-1994; 94US-00192093.
 XX 04-FEB-1994; 94US-00192102.
 XX 04-FEB-1994; 94US-00192861.
 XX 11-DEC-1995; 95US-00324799.
 XX 18-OCT-1994; 94US-00324799.
 XX 11-DEC-1995; 95US-00570674.
 XX 12-AUG-1998; 98US-00133119.
 XX 08-JAN-2001; 2001US-00756398.
 XX 10-AUG-2001; 2001US-00927703.

XX (UUNY-) UNIV NEW YORK MEDICAL CENT.

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XX
PI Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX
DR WPI; 2003-255124/25.
XX
PT Treating ankylosis in a human, comprises administering a tumor necrosis
PT factor (TNF)-inhibiting amount of anti-TNF chimeric antibody.
XX
PS Example 26; Page 52; 97pp; English.
XX
CC The invention discloses a method for treating ankylosis, by administering
CC a tumour necrosis factor (TNF)-inhibiting anti-TNF chimeric antibody
CC which competitively inhibits binding of TNF to the murine monoclonal
CC antibody cA2, where the antibody comprises an immunoglobulin (Ig) G1
CC constant region and binds to an epitope of human TNF. The antibody
CC consists of a constant region heavy or light chain of human origin and an
CC antigen binding region, comprising complementarity determining regions
CC (CDRs) derived from an antibody of murine origin that binds to human
CC TNFalpha (A2 or cA2), and a framework region derived from a heavy or
CC light chain of human origin. The cytokine TNF causes pro-inflammatory
CC actions which result in tissue injury, such as inducing procoagulant
CC activity on vascular endothelial cells, increasing the adherence of
CC neutrophils and lymphocytes and stimulating the release of platelet
CC activating factor from macrophages, neutrophils and vascular endothelial
CC cells. The methods and compositions are also useful for the diagnosis and
CC treatment of ankylosis and TNF-related pathologies, such as acute and
CC chronic immune and autoimmune disorders (rheumatoid arthritis,
CC thyroidosis, graft versus host disease, scleroderma, diabetes and Grave's
CC disease), bacterial and viral infections including AIDS, inflammatory
CC diseases (sarcoidosis, chronic inflammatory bowel disease, ulcerative
CC colitis, Crohn's disease and atherosclerosis), neurodegenerative diseases
CC (multiple sclerosis, Parkinson's disease, dementia and Alzheimer's
CC disease), cancer, hepatitis, ocular neovascularisation, psoriasis,
CC duodenal ulcers and angiogenesis of the female reproductive tract. The
CC chimeric anti-TNF Mab was well-tolerated and involved no haemodynamic,
CC febrile or allergic episodes. The sequence presented is a PCR primer
CC which was used to amplify the p55 extracellular domain
XX
SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 835 TTGTGCTTACCCAGATT 852
Db 18 TTGTGCTTACCCAGATT 1

RESULT 111
ACD28380/c
ID ACD28380 standard; DNA; 18 BP.
XX
XX ACD28380;
XX
XX
XX 06-NOV-2003 (first entry)
XX
XX Human p55 extracellular domain associated primer #2.
XX
KW Human; tumour necrosis factor alpha; TNF alpha; immunomodulator;
KW TNF-Antagonist; cachexia; cancer; HIV; AIDS; PCR; primer; ss; p55.
XX
XX Homo sapiens.
XX
XX US2003054004-A1.
XX
XX 20-MAR-2003.
XX
XX
XX 10-JAN-2002; 2002US-00043432.
XX
PR 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.

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XX 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
PR 04-FEB-1994; 94US-00192861.
PR 18-OCT-1994; 94US-00324799.
PR 11-DEC-1995; 95US-00570674.
PR 12-AUG-1998; 98US-00133119.
PR 08-JAN-2001; 2001US-00756398.
XX (UINY ) UNIV NEW YORK STATE.
XX
XX Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX WPI; 2003-744929/70.
XX
XX New human anti-tumor necrosis factor (TNF) antibody or its antigen
XX binding fragment that competitively inhibits binding of A2 or CA2 to
XX human TNF-alpha, useful for diagnosing and treating TNF-alpha-mediated
XX diseases, e.g. infection.
XX
XX Example 26; SEQ ID NO 15; 97pp; English.
XX
XX The invention relates to a human anti-tumour necrosis factor (TNF)
XX antibody or its antigen binding fragment that competitively inhibits
XX binding of its antibodies A2 or CA2 to human TNF-alpha. The invention also
XX relates to a composition comprising the antibody or its antigen binding
XX fragment and a carrier, a human light or heavy chain that specifically
XX binds human TNF-alpha and competitively inhibits binding of A2 or CA2 to
XX human TNF-alpha, the human light or heavy chain consisting of the
XX complementarity determining regions of the light or heavy chain of A2 or
XX CA2, and a human light or heavy chain framework region and an isolated
XX nucleic acid that encodes the above human heavy or light chain. The
XX antibody is useful in vivo diagnosis and therapy of TNF-alpha-mediated
XX pathologies and conditions, such as infections (e.g. bacterial, viral,
XX fungal or parasitic), inflammatory diseases (e.g. sarcoidosis,
XX atherosclerosis), autoimmune diseases (e.g. rheumatoid arthritis,
XX systemic lupus erythematosus), neurodegenerative diseases (e.g.
XX Huntington's Chorea, Parkinson's disease), malignancies (e.g. lymphomas,
XX carcinomas) and alcohol-induced hepatitis. This sequence represents a PCR
XX primer used in the scope of the invention.
XX
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTTACCCAGATT 852
Db 18 TTGTGCTTACCCAGATT 1

RESULT 113
IDC61368/c
AD C61368 standard; DNA; 18 BP.
XX
XX ADC61368;
XX
XX 18-DEC-2003 (first entry)
XX
XX PCR primer #2 used to amplify human p55 cDNA.
XX
XX Tumour necrosis factor alpha; TNFalpha; heart pathology;
XX anti-TNF chimeric antibody; rheumatoid arthritis; cardiant; human; p55;
XX PCR; primer; ss.
XX
XX Homo sapiens.
XX

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PN US2003180299-A1.
XX
XX 25-SEP-2003.
XX
XX 28-JUN-2002; 2002US-00186559.
XX
XX 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
PR 04-FEB-1994; 94US-00192861.
PR 18-OCT-1994; 94US-00324799.
PR 11-DEC-1995; 95US-00570674.
PR 12-AUG-1998; 98US-00133119.
PR 08-JAN-2001; 2001US-00756398.
XX
XX (UINY ) UNIV NEW YORK STATE.
XX
XX Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX WPI; 2003-830975/77.
XX
XX Treating a Tumor Necrosis Factor mediated heart pathology in a human
XX comprises administering an anti-TNF chimeric antibody.
XX
XX Example 16; Page 52; 99pp; English.
XX
XX The present invention relates to a method of treating a tumour necrosis
XX Factor (TNF)-mediated heart pathology in a human subject. The method
XX comprises administering an anti-TNF chimeric antibody which is specific
XX for human TNFalpha. The method is useful for treating heart pathologies
XX and rheumatoid arthritis. The present sequence represents a PCR primer
XX used in the examples of the present invention.
XX
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTTACCCAGATT 852
Db 18 TTGTGCTTACCCAGATT 1

RESULT 114
ADD44668/c
ID ADD44668 standard; DNA; 18 BP.
XX
XX ADD44668;
XX
XX 15-JAN-2004 (first entry)
XX
XX p55 extracellular domain PCR primer #2.
XX
XX human; tumour necrosis factor alpha; ss; PCR; primer;
XX vascular inflammation; anti-TNF; tumour necrosis factor;
XX Kawasaki's pathology; disseminated intravascular coagulation;
XX atherosclerosis; CA2.
XX
XX Homo sapiens.
XX
XX US2003181695-A1.
XX
XX 25-SEP-2003.
XX
XX 21-FEB-2003; 2003US-00371961.
XX
XX 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.

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PR 11-SEP-1992; 92US-00943852.
 PR 29-JAN-1993; 93US-00010406.
 PR 02-FEB-1993; 93US-00013413.
 PR 04-FEB-1994; 94US-00192093.
 PR 04-FEB-1994; 94US-00192102.
 PR 04-FEB-1994; 94US-00192861.
 PR 18-OCT-1994; 94US-00324799.
 PR 11-DEC-1995; 95US-00570674.
 PR 12-AUG-1998; 98US-00133119.
 PR 08-JAN-2001; 2001US-00756398.
 XX (UNYU) UNIV NEW YORK STATE.
 PA
 XX Le J, Vilcek J, Daddona P, Ghraieb J, Knight D, Siegel S;
 PI WPI; 2003-831022/77.
 XX
 XX Treating a vascular inflammatory pathology, e.g. Kawasaki's pathology,
 PT comprises administering an anti-Tumor Necrosis Factor (TNF) chimeric
 PT antibody which competitively inhibits binding of TNF to a monoclonal
 PT antibody.
 XX
 XX Example 26; SEQ ID NO 15; 100pp; English.
 PS
 XX The invention relates to a method of treating a vascular inflammatory
 CC pathology in a human, comprising administering a single or divided 0.5-15
 CC mg/kg dose at least once every 1-6 weeks of an anti-tumour necrosis
 CC factor (TNF) chimeric antibody which competitively inhibits binding of
 CC TNF to monoclonal antibody cA2. The invention is used to treat a vascular
 CC inflammatory pathology particularly Kawasaki's pathology or disseminated
 CC intravascular coagulation or atherosclerosis. The present sequence
 CC represents a p55 extracellular domain PCR primer.
 XX
 XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 835 TTGTGCTACCCAGATT 852
 Db 18 TTGTGCTACCCAGATT 1
 RESULT 115
 ID AAZ48498/c
 ID AAZ48498 standard; DNA; 18 BP.
 AC AAZ48498;
 XX
 XX 31-MAR-2000 (first entry)
 DT
 XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18891.
 DE
 XX Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
 KW inflammation; tumour formation; TNFR1; anticancer; ss.
 KW
 XX Synthetic.
 OS
 OS Homo sapiens.
 OS
 XX US6007995-A.
 XX
 XX 28-DEC-1999.
 PD
 XX 26-JUN-1998; 98US-00106038.
 XX
 XX 26-JUN-1998; 98US-00106038.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Baker BF, Cowser LM;
 PI
 XX WPI; 2000-105333/09.
 XX

XX Antisense inhibition of tumor necrosis factor type 1 expression for
 PT diagnosis, treatment and prevention of disease, particularly tumors.
 PT
 XX Example 10; Col 24; 34pp; English.
 PS
 XX The invention provides antisense compounds targeted to human tumour
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
 CC can be used in a method of inhibiting the expression of TNFR1 human cells
 CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
 XX
 XX Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 20;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 280 CTGCTGCTGCCGTGGTG 297
 Db 18 CTGCTGCTGCCGTGGTG 1
 RESULT 116
 ID ABT04994/c
 ID ABT04994 standard; DNA; 18 BP.
 XX
 XX ABT04994;
 AC
 XX 11-OCT-2002 (first entry)
 DT
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 24.
 DE
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 KW
 XX Homo sapiens.
 OS
 XX WO200248168-A1.
 XX
 XX 20-JUN-2002.
 PD
 XX 22-OCT-2001; 2001WO-US051224.
 XX
 XX 24-OCT-2000; 2000US-00695451.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Baker BF, Cowser LM, Zhang H, Dean NM;
 PI WPI; 2002-583481/62.
 XX
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 PT
 XX Example 10; Page 44; 121pp; English.
 PS
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for

CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 280 CTGCTGCTGCGCTGGTG 297
|||||
Db 18 CTGCTGCTGCGCTGGTG 1

RESULT 117

AAT30782
ID AAT30782 standard; DNA; 24 BP.

AC AAT30782;

XX
XX
XX 23-MAR-1998 (first entry)

DE TNF-R1 cytoplasmic domain encoding DNA amplifying forward primer.

XX CD40 associated protein; CAP; agonist; antagonist; autoimmune disease;
KW treatment; cancer; TNF-R1 cytoplasmic domain; PCR primer; ss.

XX Synthetic.

XX WO9616665-A1.

XX 06-JUN-1996.

XX 04-DEC-1995; 95WO-US015695.

XX 02-DEC-1994; 94US-00349357.

XX (LJOL-) LA JOLLA CANCER RES FOUND.

XX Reed JC, Sato T;

DR WPI; 1996-286818/29.

XX New CD40 associated protein, agonists and antagonists - used to modulate
PT cell proliferation, immune response, apoptosis etc., e.g. for treating
PT cancer or autoimmune disease.

PS Example 2; Page 63; 94pp; English.

XX This primer is used for the PCR amplification of the cytoplasmic domain
CC of TNF-R1 from a plasmid pUC19-p55-TNF-R1 to produce a GST-TNF-R1 fusion
CC protein. This is used in the production of GST fusion proteins for
CC detecting and characterising a CAP in vitro. CD40 is a cell surface
CC receptor involved in apoptosis. This system identifies CAP-1, a CD40
CC associated protein that specifically binds to CD40. Agonists and
CC antagonists of CAP can increase or decrease the level of CAP expression
CC in a cell and can thereby modulate the function of the cell. Such
CC compounds can be used to treat cancer, autoimmune diseases like asthma,
CC hay fever, rheumatoid arthritis and immunodeficiency diseases and
CC neurodegeneration. Antibodies that bind specifically to CAP can be used
CC to assay CAP, to detect pathologically altered levels. The CAP-1 encoding
CC nucleic acid can be used to identify related genes and to express CAP for
CC gene therapy

SQ Sequence 24 BP; 6 A; 6 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 958 CGCTACCAACGGTGGAG 975
|||||

Db 7 CGCTACCAACGGTGGAG 24

RESULT 118

AAQ03929

ID AAQ03929 standard; DNA; 23 BP.

AC AAQ03929;

XX 25-MAR-2003 (revised)

DT 24-AUG-1990 (first entry)

XX HPV11 typing probe (WD151) for use with L1 consensus primers.

XX Papilloma-virus; consensus primer; PCR; probe; ss.

XX Synthetic.

XX WO9002821-A.

XX 22-MAR-1990.

XX 09-SEP-1988; 88US-00243486.

XX 09-SEP-1988; 88US-00243486.

PR 10-MAR-1989; 89US-00322550.

XX (CETU) CETUS CORP.

XX Mamos MM, Wright DK, Ting Y;

XX WPI; 1990-116005/15.

XX Detecting and typing human papilloma-virus - using consensus primers in
PT polymerase chain reaction to amplify particular genomic regions.

XX Disclosure; Table 5; 33pp; English.

XX Genome position 7058. See also AAQ03998-Q03949. (Updated on 25-MAR-2003
CC to correct PR field.)

XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;

Best Local Similarity 90.5%; Pred. No. 52;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAGA 1022
|||||

Db 2 GAAACCCACACCTGAAAAGA 22
|||||

RESULT 119

AAQ03928

ID AAQ03928 standard; DNA; 23 BP.

AC AAQ03928;

DT 25-MAR-2003 (revised)

DT 24-AUG-1990 (first entry)

XX HPV11 typing probe (WD150) for use with L1 consensus primers.

XX Papilloma-virus; consensus primer; PCR; probe; ss.

XX Synthetic.

XX WO9002821-A.

XX 22-MAR-1990.

XX 09-SEP-1988; 88US-00243486.

```

PR 09-SEP-1988; 88US-00243486.
XX 10-MAR-1989; 89US-00322550.
XX (CETU ) CETUS CORP.
PI Manos MM, Wright DK, Ting Y;
XX WPI; 1990-116005/15.
DR
XX
XX Detecting and typing human papilloma-virus - using consensus primers in
PT polymerase chain reaction to amplify particular genomic regions.
XX Disclosure; Table 5; 33pp; English.
XX Genome position 7059. See also AAQ03898-Q03949. (Updated on 25-MAR-2003
CC to correct PR field.)
CC
SQ Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;
Best Local Similarity 90.5%; Pred. No. 52;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAAGA 1022
DB 3 GAAACCCACACCTGAAAAAGA 23

RESULT 120
AAQ56399
ID AAQ56399 standard; DNA; 23 BP.
XX
AC AAQ56399;
XX
XX 25-MAR-2003 (revised)
DT 29-JUL-1994 (first entry)
XX
XX L1 consensus primer HPV11 typing probe WD150.
DE Human papilloma virus; amplification; polymerase chain reaction; PCR;
KW detection; assay; ss.
XX Synthetic.
XX OS
XX US5283171-A.
PN
XX
XX 01-FEB-1994.
PD
XX
XX 15-FEB-1991; 91US-00651356.
PF
XX
XX 09-SEP-1988; 88US-00243486.
PR 10-MAR-1989; 89US-00322550.
PR 29-AUG-1989; 89WO-US003747.
XX
XX (UYRP ) UNIV ROCHESTER.
PA (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Wolinsky SM, Broker TR, Ting Y, Manos MM, Wright DK;
XX WPI; 1994-048082/06.
DR
XX
XX Detection of genital human papilloma virus - by PCR amplification using
PT defined consensus primer pairs.
XX Disclosure; Page 8; 13pp; English.
XX
XX The sequence is that of HPV11 typing probe WD151 for use with L1
CC consensus primers as part of a simple and rapid assay method for
CC detecting and typing HPV in biological samples. (Updated on 25-MAR-2003
CC to correct PF field.)
XX
XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 17.8; DB 1; Length 23;
Best Local Similarity 90.5%; Pred. No. 52;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAAGA 1022
DB 2 GAAACCCACACCTGAAAAAGA 22

RESULT 122
AAT10824
ID AAT10824 standard; DNA; 23 BP.
XX
AC AAT10824;
XX
XX 25-MAR-2003 (revised)
DT 10-APR-1996 (first entry)
XX
XX Human papilloma virus 11 specific oligonucleotide probe WD150.
SQ

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```

XX Human papilloma virus; probe; detection; diagnosis; genital; oral;
XX carcinomas; research; typing; HPV11; specific; WD150; ss.
XX Synthetic.
XX US5447839-A.
XX 05-SEP-1995.
XX 20-APR-1993; 93US-00050743.
XX 09-SEP-1988; 88US-00243486.
XX 10-MAR-1989; 89US-00322550.
XX 09-SEP-1989; 89WO-US003747.
XX 14-NOV-1990; 90US-00613142.
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Ting Y, Resnick RM, Greer CE, Manos MM, Bauer HM;
XX WPI; 1995-319884/41.
XX
XX Detection of human papilloma virus DNA by amplification - using specific
XX consensus primer pairs and pref. detection with generic or type specific
XX probes for use in research and diagnosis.
XX
XX Claim 3; Col 15-16; 36pp; English.
XX
XX The human papilloma virus (HPV) specific probes AAT10818-T10839 are used
XX to detect, or type HPV for research or diagnostic purposes, e.g. to
XX identify HPV that are implicated in genital or oral carcinomas. (Updated
XX on 25-MAR-2003 to correct PF field.)
XX
XX Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.8%; Score 17.8; DB 1; Length 23;
XX Best Local Similarity 90.5%; Pred. No. 52;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1002 GAAATCGACACCTGAAAAAGA 1022
XX ||||| ||||| ||||| |||||
XX 3 GAAACCCACACCTGAAAAAGA 23
XX
XX
XX RESULT 123
XX AAT10825
XX ID AAT10825 standard; DNA; 23 BP.
XX AC AAT10825;
XX
XX 25-MAR-2003 (revised)
XX DT 10-APR-1996 (first entry)
XX
XX Human papilloma virus 11 specific oligonucleotide probe WD151.
XX
XX Human papilloma virus; probe; detection; diagnosis; genital; oral;
XX carcinomas; research; typing; HPV11; specific; WD151; ss.
XX Synthetic.
XX US5447839-A.
XX 05-SEP-1995.
XX 20-APR-1993; 93US-00050743.
XX 09-SEP-1988; 88US-00243486.
XX 10-MAR-1989; 89US-00322550.
XX 09-SEP-1989; 89WO-US003747.
XX 14-NOV-1990; 90US-00613142.
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX

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XX Ting Y, Resnick RM, Greer CE, Manos MM, Bauer HM;
XX WPI; 1995-319884/41.
XX
XX Detection of human papilloma virus DNA by amplification - using specific
XX consensus primer pairs and pref. detection with generic or type specific
XX probes for use in research and diagnosis.
XX
XX Claim 3; Col 15-16; 36pp; English.
XX
XX The human papilloma virus (HPV) specific probes AAT10818-T10839 are used
XX to detect, or type HPV for research or diagnostic purposes, e.g. to
XX identify HPV that are implicated in genital or oral carcinomas. (Updated
XX on 25-MAR-2003 to correct PF field.)
XX
XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.8%; Score 17.8; DB 1; Length 23;
XX Best Local Similarity 90.5%; Pred. No. 52;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1002 GAAATCGACACCTGAAAAAGA 1022
XX ||||| ||||| ||||| |||||
XX 2 GAAACCCACACCTGAAAAAGA 22
XX
XX
XX RESULT 124
XX AAT44771
XX ID AAT44771 standard; DNA; 23 BP.
XX AC AAT44771;
XX
XX 25-MAR-2003 (revised)
XX DT 29-JAN-1997 (first entry)
XX
XX HPV typing probe WD151 for use with L1 consensus primers.
XX
XX Probe; primer; PCR; polymerase chain reaction; amplification;
XX human papillomavirus; consensus; ss.
XX Synthetic.
XX US5527898-A.
XX 18-JUN-1996.
XX 07-JUN-1995; 95US-00474542.
XX 09-SEP-1988; 88US-00243486.
XX 10-MAR-1989; 89US-00322550.
XX 09-SEP-1989; 89WO-US003747.
XX 14-NOV-1990; 90US-00613142.
XX 20-APR-1993; 93US-00050743.
XX 24-SEP-1993; 93US-00126452.
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Bauer HM, Resnick RM, Greer CE, Manos MM, Zhang TY, Gravitt PE;
XX WPI; 1996-239903/30.
XX
XX Nucleic acid hybridisation probes - specific for selected human papilloma
XX virus types.
XX Disclosure; Col 31-32; 96pp; English.
XX
XX The invention relates to new oligonucleotide probes and primers used for
XX the detection of human papillomaviruses (HPV) which are not genital types
XX 6, 11, 16, 18 or 33. The probes and primers AAT44608-T44693 are esp. used
XX to detect HPV types 26, 31, 31B, 35, 39, 40, 43, 45, 51-59 and 68. The
XX primers can be used to detect these HPV types in conjunction with the
XX consensus primers and typing probes AAT44733-T44906, which are based on

```

CC and amplify fragments of the L1, E6, E7 and E1 regions of the HPV
 CC sequences. Detection of the amplification products is done with probes
 CC derived from consensus sequences found in all characterised HPV
 CC sequences. Probes AAT44762-810 are examples of HPV typing probes for
 CC identifying the amplified products generated by L1 consensus primers.
 CC This sequence is a sense probe which has specificity for HPV11 and binds
 CC to the HPV genome at position 7058. (Updated on 25-MAR-2003 to correct PR
 CC field.)
 XX
 SQ Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;
 Best Local Similarity 90.5%; Pred. No. 52;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAAGA 1022
 |||||
 Db 2 GAAACCCACACCTGAAAAAGA 22

RESULT 125
 AAT44770
 ID AAT44770 standard; DNA; 23 BP.

AC AAT44770;
 XX

DT 25-MAR-2003 (revised)
 DT 29-JAN-1997 (first entry)

XX HPV typing probe WD150 for use with L1 consensus primers.

DE Probe; primer; PCR; polymerase chain reaction; amplification;
 KW human papillomavirus; consensus; ss.

XX Synthetic.
 XX US5527898-A.

PN 18-JUN-1996.
 PD 07-JUN-1995; 95US-00474542.

XX 09-SEP-1988; 88US-00243486.
 PR 10-MAR-1989; 89US-00322550.

PR 09-SEP-1989; 89WO-US003747.
 PR 14-NOV-1990; 90US-00613142.

PR 20-APR-1993; 93US-00050743.
 PR 24-SEP-1993; 93US-00126452.

XX (HOFF) HOFFMANN LA ROCHE INC.
 XX Bauer HM, Resnick RM, Greer CE, Manos MM, Zhang TY, Gravitt PB;

PI WPI; 1996-299903/30.
 DR Nucleic acid hybridisation probes - specific for selected human papilloma
 PT virus types.

XX Disclosure; Col 31-32; 96pp; English.

XX The invention relates to new oligonucleotide probes and primers used for
 CC the detection of human papillomaviruses (HPV) which are not genital types
 CC 6, 11, 16, 18 or 33. The probes and primers AAT44608-T44693 are esp. used
 CC to detect HPV types 26, 31, 31B, 35, 39, 40, 43, 45, 51-59 and 68. The
 CC primers can be used to detect these HPV types in conjunction with the
 CC consensus primers and typing probes AAT44733-T44906, which are based on
 CC and amplify fragments of the L1, E6, E7 and E1 regions of the HPV
 CC sequences. Detection of the amplification products is done with probes
 CC derived from consensus sequences found in all characterised HPV
 CC sequences. Probes AAT44762-810 are examples of HPV typing probes for
 CC identifying the amplified products generated by L1 consensus primers.
 CC This sequence is a sense probe which has specificity for HPV11 and binds
 CC to the HPV genome at position 7059. (Updated on 25-MAR-2003 to correct PR

CC field.)

XX Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;
 Best Local Similarity 90.5%; Pred. No. 52;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAAGA 1022
 |||||
 Db 3 GAAACCCACACCTGAAAAAGA 23

RESULT 126
 AAT78015
 ID AAT78015 standard; DNA; 23 BP.

XX AAT78015;
 XX

DT 25-MAR-2003 (revised)
 DT 07-OCT-1997 (first entry)

XX Human papillomavirus 11 specific typing probe WD151.

DE Human; papillomavirus 11; HPV11; typing probe; detection; ss.

XX Synthetic.
 XX US5639871-A.

PN 17-JUN-1997.
 PD 01-JUN-1995; 95US-00457648.

XX 09-SEP-1988; 88US-00243486.
 PR 10-MAR-1989; 89US-00322550.

PR 29-AUG-1989; 89WO-US003747.
 PR 14-NOV-1990; 90US-00613142.

PR 20-APR-1993; 93US-00050743.
 PR 24-SEP-1993; 93US-00126452.

XX (HOFF) ROCHE MOLECULAR SYSTEMS INC.
 XX Imbraim CC, Manos MM, Bauer HM, Zhang TY, Greer CE, Resnick RM;

PI Gravitt PB;
 XX WPI; 1997-332084/30.

DR New oligonucleotide probes for human papilloma-virus - used for
 PT detecting and typing HPV and for detecting previously unknown HPV types
 PT and subtypes.

XX Disclosure; Col 119-120; 94pp; English.

XX The present sequence is a human papillomavirus 11 (HPV11) specific typing
 CC probe. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-
 CC 2003 to correct PR field.)

XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;
 Best Local Similarity 90.5%; Pred. No. 52;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAAGA 1022
 |||||
 Db 2 GAAACCCACACCTGAAAAAGA 22

RESULT 127
 AAT78014
 ID AAT78014 standard; DNA; 23 BP.

XX

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AC AAT78014;
XX
DT 25-MAR-2003 (revised)
DT 07-OCT-1997 (first entry)
XX
DE Human papillomavirus 11 specific typing probe WD150.
DE
XX Human; papillomavirus 11; HPV11; typing probe; detection; ss.
XX
OS Synthetic.
OS
XX US5639871-A.
XX
PN 17-JUN-1997.
XX
PD 01-JUN-1995; 95US-00457648.
XX
PR 09-SEP-1988; 88US-00243486.
PR 10-MAR-1989; 89US-00322550.
PR 29-AUG-1989; 89WO-US003747.
PR 14-NOV-1990; 90US-00613142.
PR 20-APR-1993; 93US-00050743.
PR 24-SEP-1993; 93US-00126452.
XX
PA (HOFF ) ROCHE MOLECULAR SYSTEMS INC.
XX
PI Imprim CC, Manos MM, Bauer HM, Zhang TY, Greer CE, Resnick RM;
PI Gravitt PE;
XX
DR WPI; 1997-332084/30.
XX
XX New oligo:nucleotide probes for human papilloma-virus - used for
PT detecting and typing HPV and for detecting previously unknown HPV types
PT and subtypes.
XX
PS Disclosure; Col 117-118; 94pp; English.
XX
CC The present sequence is a human papillomavirus 11 (HPV11) specific typing
CC probe. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-
CC 2003 to correct PR field.)
XX
SQ Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;
Best Local Similarity 90.5%; Pred. No. 52;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAGA 1022
Db ||||| ||||| ||||| ||||| |||||
3 GAAACCCACACCTGAAAAGA 23

RESULT 128
AAV17415
ID AAV17415 standard; DNA; 23 BP.
XX
AC AAV17415;
XX
DT 25-MAR-2003 (revised)
DT 04-JUN-1998 (first entry)
XX
DE Probe WD151 for human papillomavirus typing.
XX
XX Human papillomavirus; HPV; HPV detection; HPV typing;
KW L1 type-specific probe; ss.
XX
OS Synthetic.
OS Human papillomavirus.
XX
XX US5705627-A.
XX
PD 06-JAN-1998.
XX

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PF 26-MAY-1995; 95US-00452055.
XX
XX 09-SEP-1988; 88US-00243486.
PR 10-MAR-1989; 89US-00322550.
PR 14-NOV-1990; 90US-00613142.
PR 20-APR-1993; 93US-00050743.
XX
PA (HOFF ) ROCHE MOLECULAR SYSTEMS INC.
XX
XX Ting Y, Resnick RM, Greer CE, Bauer HM, Manos MM;
XX WPI; 1998-192210/17.
XX
XX Human papilloma probes and primers - useful for, e.g. detecting and
XX typing of human papilloma viruses.
XX
PS Claim 1; Col 15-16; 37pp; English.
XX
CC This sequence represents a human papillomavirus (HPV) L1 type-specific
CC probe of the invention. This sequence may be used in conjunction with L1
CC specific primers for detecting and typing HPV. Identification and typing
CC of HPV is important as different types of HPV pose different risks for
CC infected individuals. HPV16 and HPV18 have been more consistently
CC identified in higher grades of cervical dysplasia and carcinoma than
CC other HPV types. (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;
Best Local Similarity 90.5%; Pred. No. 52;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAGA 1022
Db ||||| ||||| ||||| ||||| |||||
2 GAAACCCACACCTGAAAAGA 22

RESULT 129
AAV17414
ID AAV17414 standard; DNA; 23 BP.
XX
AC AAV17414;
XX
DT 25-MAR-2003 (revised)
DT 04-JUN-1998 (first entry)
XX
DE Probe WD150 for human papillomavirus typing.
XX
XX Human papillomavirus; HPV; HPV detection; HPV typing;
KW L1 type-specific probe; ss.
XX
OS Synthetic.
OS Human papillomavirus.
XX
XX US5705627-A.
XX
PD 06-JAN-1998.
XX
XX 26-MAY-1995; 95US-00452055.
XX
XX 09-SEP-1988; 88US-00243486.
PR 10-MAR-1989; 89US-00322550.
PR 14-NOV-1990; 90US-00613142.
PR 20-APR-1993; 93US-00050743.
XX
PA (HOFF ) ROCHE MOLECULAR SYSTEMS INC.
XX
XX Ting Y, Resnick RM, Greer CE, Bauer HM, Manos MM;
XX WPI; 1998-192210/17.
XX
XX Human papilloma probes and primers - useful for, e.g. detecting and
XX typing of human papilloma viruses.
XX

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XX PS Claim 1; Col 15-16; 37pp; English.

CC This sequence represents a human papillomavirus (HPV) L1 type-specific

CC probe of the invention. This sequence may be used in conjunction with L1

CC specific primers for detecting and typing HPV. Identification and typing

CC of HPV is important as different types of HPV pose different risks for

CC infected individuals. HPV16 and HPV18 have been more consistently

CC identified in higher grades of cervical dysplasia and carcinoma than

CC other HPV types. (Updated on 25-MAR-2003 to correct PR field.)

XX SQ Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;

Best Local Similarity 90.5%; Pred. No. 52;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAATCGACACCTGAAAAAGA 1022

DB 3 GAAACCCACACCTGAAAAAGA 23

RESULT 130

AAV55819

ID AAV55819 standard; DNA; 24 BP.

XX AC AAV55819;

XX DT 27-AUG-2003 (revised)

XX DT 18-NOV-1998 (first entry)

XX DE Multimerisation of minimal motifs using primer ZGE2.

XX KW Fusion protein; stabilising polypeptide; proteolytic degradation;

XX KW resistance; half-life; autoimmune disease; inflammation; nitro drug;

XX KW IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;

XX KW nitroreductase protein; enzyme therapy; prodrug therapy; protease;

XX KW cancer; pathological condition; minimal motif; PCR primer; ss.

XX OS Synthetic.

XX OS Human herpesvirus 4.

XX PN WO9822577-A1.

XX PD 28-MAY-1998.

XX PF 17-NOV-1997; 97WO-IB001508.

XX PR 15-NOV-1996; 96US-0030986P.

XX PR 25-JUN-1997; 97US-0048945P.

XX PA (MASU//) MASUCCI M G.

XX PI Masucci MG;

XX DR WPI; 1998-312463/27.

XX PT New fusion proteins resistant to proteolytic degradation - comprising a

XX PT core protein with a stabilising polypeptide comprising a peptide sequence

XX PT containing glycine repeats.

XX PS Disclosure; Page 72; 120pp; English.

XX CC Sequences shown in AAV55812 to AAV55827 represent primers used in the

XX CC course of the invention for the multimerisation of minimal motifs. The

XX CC invention provides a method for increasing the resistance of a core

XX CC protein to proteolytic degradation that comprises linking or inserting

XX CC onto or into the core protein a stabilising polypeptide of formula

XX CC [(Glya)x(Glyb)y(Glyc)z]n where Glya, Glyb, Glyc are 1-6 sequential Gly

XX CC residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr

XX CC and n can be anything between 1-66. X, Y and Z need not be identical from

XX CC n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising

XX CC polypeptide can be linked onto or inserted into a nucleic acid encoding a

CC core protein. The fusion proteins of the invention are more resistant to

CC degradation by proteases and, thus, have a longer half-life than the

CC unfused core protein. The products can be used for treating autoimmune

CC diseases, cancer and inflammation. In particular, the core protein may be

CC an IkappaB regulator protein for the treatment of inflammatory bowel

CC disease, or a nitroreductase protein which can activate nitro drugs in

CC enzyme/prodrug therapy to treat cancer or other pathological conditions.

CC The fusion proteins can also be used in diagnostic methods such as in

CC vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)

XX SQ Sequence 24 BP; 3 A; 14 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 24;

Best Local Similarity 90.5%; Pred. No. 60;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1126 TCCACCTTCACCTCCAGCTCC 1146

DB 2 TCCACCCGCACTCCAGCTCC 22

RESULT 131

ADB68055/c

ID ADB68055 standard; DNA; 24 BP.

XX AC ADB68055;

XX DT 04-DEC-2003 (first entry)

XX DE G4 phosphorothioate oligonucleotide 2a used to modulate telomere length.

XX KW telomere length; aging; hyperproliferative condition; cancer; ss; G4.

XX OS Unidentified.

XX FT Key Location/Qualifiers

FT modified_base 13

FT /*tag= a

FT /mod_base= i

FT /note= "Inosine"

XX US2003096776-A1.

XX PD 22-MAY-2003.

XX PF 02-JAN-2002; 2002US-00038335.

XX PR 29-SEP-1992; 92US-00954185.

XX PR 29-SEP-1993; 93WO-US009297.

XX PR 12-JUN-1995; 95US-00403888.

XX PR 23-APR-1999; 99US-00299058.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;

XX PI Ecker DJ, Vickers TA, Wyatt JR;

XX WPI; 2003-606442/57.

XX PT New chemically modified oligonucleotides, useful for modulating telomere

XX PT length of a mammalian chromosome, inhibiting the division of a malignant

XX PT mammalian cell, or modulating the effects of aging of a mammalian cell.

XX PS Example 2; Page 6; 10pp; English.

XX CC The invention relates to a novel chemically modified oligonucleotide

XX CC having no more than about 27 nucleic acid base units. The oligonucleotide

XX CC modulates mammalian telomere length. The chemically modified

XX CC oligonucleotide of the invention may be useful for modulating the

XX CC telomere length of a mammalian chromosome, inhibiting the division of a

XX CC malignant mammalian cell or modulating the effects of aging of a

XX CC mammalian cell. The oligonucleotides may also be useful for treating

XX CC diseases associated with abnormal telomere length such as aging and

CC hyperproliferative conditions including cancer. The current sequence is
 CC that of the G4 phosphorothioate oligonucleotide 2 (alternative) of the
 CC invention which was used to modulate telomere length.

SQ Sequence 24 BP; 0 A; 0 C; 16 G; 7 T; 0 U; 1 Other;
 Query Match 0.8%; Score 17.8; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 60;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCAACCCC 1266
 24 CCCGACCCCAACCCC 3

RESULT 132
 ABK16809
 ID ABK16809 standard; DNA; 24 BP.

XX AC ABK16809;

XX DT 26-MAR-2002 (first entry)

XX DE Human protein refolding PCR primer #36.

XX KW Protein refolding; growth hormone supergene family; human; mouse; ss;
 XX KW therapeutic half-life; PCR primer; anti-angiogenesis factor.

XX OS Homo sapiens.

XX FN WO200187925-A2.

XX PD 22-NOV-2001.

XX PF 16-MAY-2001; 2001WO-US016088.

XX PR 16-MAY-2000; 2000US-0204617P.

XX PA (BOLD-) BOLDER BIOTECHNOLOGY INC.

XX PI Rosendahl MS, Cox GN, Doherty DH;

XX DR WPI; 2002-089843/12.

XX PT Making and refolding insoluble or aggregated proteins having free
 PT cysteine by exposing host cell expressing protein to cysteine blocking
 PT agent, and exposing to cysteine reactive group to increase their
 PT effectiveness.

XX PS Example 9; Page 39; 110pp; English.

XX CC The invention relates to a host cell, made to express an insoluble or
 CC aggregated protein having free cysteines residues. The cell is then lysed
 CC by chemical, enzymatic or physical agents and solubilised by exposing it
 CC to a denaturing agent, a reducing agent and a cysteine blocking agent,
 CC and is refolded into a biologically active form by reducing the
 CC concentrations of denaturing and reducing agents. The protein may belong
 CC to the growth hormone supergene family or may be an anti-angiogenesis
 CC factor. The method is useful for preparing a refolded, soluble form of an
 CC insoluble or aggregated protein. The proteins of the invention can act as
 CC delivery vehicles for enhancement of the circulatory half-life of the
 CC therapeutics that are attached or for directing delivery of a specific
 CC target within the body. Sequences ABK16774-ABK16852 represent PCR primers
 CC used in synthesis of the proteins

SQ Sequence 24 BP; 4 A; 8 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.6; DB 1; Length 24;
 Best Local Similarity 83.3%; Pred. No. 68;
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 944 TTGCTTTTAACTGCTACCAAC 967
 ||||| ||||| ||||| |||||

Db 1 TTCGTTTTCTCTATCGCTACCAAC 24

RESULT 133

ABT05167/c

XX ID ABT05167 standard; DNA; 20 BP.

XX AC ABT05167;

XX DT 11-OCT-2002 (first entry)

XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 197.

XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX KW mouse; murine; ds.

XX OS Mus sp.

XX PN WO200248168-A1.

XX PD 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;

XX DR WPI; 2002-583481/62.

XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX PS Example 21; Page 61; 121pp; English.

XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a mouse oligonucleotide relating
 CC to the TNFR1 of the invention

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 42;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 756 CTGCCATGCAGGTTCTTT 774

Db 19 CTGCCATGCAGGTTCTTT 1
 ||||| ||||| ||||| |||||

RESULT 134

AAQ61998/c

XX ID AAQ61998 standard; DNA; 22 BP.

XX AC AAQ61998;

XX DT 25-MAR-2003 (revised)

XX DR 04-NOV-1994 (first entry)

XX DE Guanine quartet containing oligomer, #9.

PD 14-APR-1994.
 XX
 XX 29-SEP-1993; 93WO-US009297.
 XX
 XX 29-SEP-1992; 92US-00954185.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX WPI; 1994-135613/16.
 XX
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 XX
 XX Disclosure; Page 19; 144pp; English.
 XX
 XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
 CC which contain a G4 or two G3 stretches and which may be used for
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
 CC such as these may also be used for inhibiting activity of HIV, human
 CC cytomegalovirus or influenza virus, or for treating inflammatory and
 CC neurological disorders caused by phospholipase A2 activity in cases of
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.
 CC They may also be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 XX SQ Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 17.2; DB 1; Length 22;
 Best Local Similarity 86.4%; Pred. No. 65;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CTCGACCCCATCCCAACCCC 1266
 Db 22 CCCCAACCCCAACCCCAACCCC 1
 RESULT 137
 AAQ61903/c
 ID AAQ61903 standard; DNA; 22 BP.
 AC AAQ61903;
 XX
 XX 25-MAR-2003 (revised)
 DT 04-NOV-1994 (first entry)
 XX
 XX HSV replication inhibiting oligomer, ISIS no 5670.
 XX
 XX Inhibition; replication; herpes simplex virus; HSV; HIV;
 KW human cytomegalovirus; influenza virus; inflammation;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy;
 KW telomere length; retard; aging; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT misc_feature 1..22
 FT /note= "Phosphorothionate intersugar linkages"
 FT /tag= a
 XX
 XX W09408053-A1.
 XX
 XX 14-APR-1994.
 PD
 XX 29-SEP-1993; 93WO-US009297.
 XX
 XX 29-SEP-1992; 92US-00954185.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX WPI; 1994-135613/16.
 XX
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 XX
 XX Disclosure; Page 19; 144pp; English.
 XX
 XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
 CC which contain a G4 or two G3 stretches and which may be used for
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
 CC such as these may also be used for inhibiting activity of HIV, human
 CC cytomegalovirus or influenza virus, or for treating inflammatory and
 CC neurological disorders caused by phospholipase A2 activity in cases of
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.
 CC They may also be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 XX SQ Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 17.2; DB 1; Length 22;
 Best Local Similarity 86.4%; Pred. No. 65;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CTCGACCCCATCCCAACCCC 1266
 Db 22 CCCCAACCCCAACCCCAACCCC 1
 RESULT 137
 AAQ61903/c
 ID AAQ61903 standard; DNA; 22 BP.
 AC AAQ61903;
 XX
 XX 25-MAR-2003 (revised)
 DT 04-NOV-1994 (first entry)
 XX
 XX HSV replication inhibiting oligomer, ISIS no 5670.
 XX
 XX Inhibition; replication; herpes simplex virus; HSV; HIV;
 KW human cytomegalovirus; influenza virus; inflammation;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy;
 KW telomere length; retard; aging; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT misc_feature 1..22
 FT /note= "Phosphorothionate intersugar linkages"
 FT /tag= a
 XX
 XX W09408053-A1.
 XX
 XX 14-APR-1994.
 PD
 XX 29-SEP-1993; 93WO-US009297.
 XX
 XX 29-SEP-1992; 92US-00954185.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX WPI; 1994-135613/16.
 XX
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 XX
 XX Disclosure; Page 19; 144pp; English.
 XX
 XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
 CC which contain a G4 or two G3 stretches and which may be used for
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
 CC such as these may also be used for inhibiting activity of HIV, human
 CC cytomegalovirus or influenza virus, or for treating inflammatory and
 CC neurological disorders caused by phospholipase A2 activity in cases of
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.
 CC They may also be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 XX SQ Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 17.2; DB 1; Length 22;
 Best Local Similarity 86.4%; Pred. No. 65;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CTCGACCCCATCCCAACCCC 1266
 Db 22 CCCCAACCCCAACCCCAACCCC 1
 RESULT 138
 AAQ97987/c
 ID AAQ97987 standard; DNA; 22 BP.
 AC AAQ97987;
 XX
 XX 25-MAR-2003 (revised)
 DT 19-OCT-1995 (first entry)
 XX
 XX Peptide nucleic acid oligomer targetting HIV gene.
 XX
 XX Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
 KW antiviral; antisense; triple helix; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT misc_feature 1..22
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine
 FT peptide residues, the nucleobase being attached
 FT covalently to the acetyl group and the peptide linkage
 FT being formed by condensation of the glycine carboxy group
 FT of one residue with the amino group of the 2-aminoethyl
 FT moiety in the next residue"
 XX
 XX W09504068-A1.
 XX
 XX 09-FEB-1995.
 XX
 XX 28-JUL-1994; 94WO-US008517.
 XX
 XX 29-JUL-1993; 93US-00099718.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Ecker DJ;
 PI

PA (ISIS-) ISIS PHARM INC.
 XX
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX WPI; 1994-135613/16.
 XX
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 XX
 XX Disclosure; Page 19; 144pp; English.
 XX
 XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
 CC which contain a G4 or two G3 stretches and which may be used for
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
 CC such as these may also be used for inhibiting activity of HIV, human
 CC cytomegalovirus or influenza virus, or for treating inflammatory and
 CC neurological disorders caused by phospholipase A2 activity in cases of
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.
 CC They may also be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 XX SQ Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
 Query Match 0.8%; Score 17.2; DB 1; Length 22;
 Best Local Similarity 86.4%; Pred. No. 65;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CTCGACCCCATCCCAACCCC 1266
 Db 22 CCCCAACCCCAACCCCAACCCC 1
 RESULT 138
 AAQ97987/c
 ID AAQ97987 standard; DNA; 22 BP.
 AC AAQ97987;
 XX
 XX 25-MAR-2003 (revised)
 DT 19-OCT-1995 (first entry)
 XX
 XX Peptide nucleic acid oligomer targetting HIV gene.
 XX
 XX Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
 KW antiviral; antisense; triple helix; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT misc_feature 1..22
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine
 FT peptide residues, the nucleobase being attached
 FT covalently to the acetyl group and the peptide linkage
 FT being formed by condensation of the glycine carboxy group
 FT of one residue with the amino group of the 2-aminoethyl
 FT moiety in the next residue"
 XX
 XX W09504068-A1.
 XX
 XX 09-FEB-1995.
 XX
 XX 28-JUL-1994; 94WO-US008517.
 XX
 XX 29-JUL-1993; 93US-00099718.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Ecker DJ;
 PI

XX WPI; 1995-082179/11.
 XX Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid
 PT sub-unit - binds in complementary manner to DNA and RNA, and useful for
 PT modulating HIV viral activity, e.g. in treating AIDS.
 XX
 XX Claim 2; Page 176; 186pp; English.
 XX
 CC New peptide nucleic acid (PNA) oligomers are provided which (a) consist
 CC of naturally occurring nucleobases covalently bound to a polyamide
 CC backbone and (b) hybridise to the translation initiation AUG region, 5'
 CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice
 CC junctions or coding sequence of a human immunodeficiency virus gene
 CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target
 CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene
 CC regulation moieties. They have utility as gene-targeted drugs for
 CC modulating HIV processes. Hence they can be used to treat AIDS and other
 CC viral infections. They are also useful in diagnostic applications and as
 CC research tools. PNA oligomers have high affinity for complementary single
 CC stranded DNA. They are also able to form triple helices in which a first
 CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the
 CC resulting double helix or with the first PNA strand. The PNAs possess no
 CC significant charge and are water soluble, which facilitates cellular
 CC uptake. Further, since they contain amides of non-biological amino acids,
 CC they are biostable and resistant to enzymatic degradation by proteases.
 CC The present sequence is a specifically claimed PNA sequence (represented
 CC by the sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-
 CC 2003 to correct PN field.)
 XX
 XX Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 17.2; DB 1; Length 22;
 Best Local Similarity 86.4%; Pred. No. 65;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CTCGACCCCATCCCAACCCC 1266
 Db 22 CCCCAACCCCAACCCCAACCCC 1
 RESULT 139
 AAQ73376/c
 ID AAQ73376 standard; DNA; 24 BP.
 AC AAQ73376;
 XX
 XX 25-MAR-2003 (revised)
 DT 02-MAY-1995 (first entry)
 XX
 XX Anti-HSV-1 G4 oligo #5651.
 DE
 XX Hybridise; herpes simplex virus; HSV; open reading frame;
 KW translation initiation site; coding region; 5' UTR; ss.
 KW
 XX Synthetic.
 OS
 XX WO9419945-A1.
 PN
 XX 15-SEP-1994.
 PD
 XX 07-MAR-1994; 94WO-US002471.
 PF
 XX 12-MAR-1993; 93US-00031147.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Draper KG, Crooke ST, Mirabelli CK, Ecker DJ, Hanecak R;
 PI Anderson KP, Brown-Driver VL, Wyatt JR;
 XX WPI; 1994-302552/37.
 DR
 XX New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene -

PT are used in the treatment and diagnosis of herpes simplex virus,
 PT cytomegalovirus, Epstein Barr virus and varicella zoster infections.
 XX
 XX Claim 12; Page 35; 72pp; English.
 XX
 CC The sequences given in AAQ73325-81 represent oligonucleotides which
 CC hybridise specifically with DNA or RNA from a herpes virus gene
 CC corresponding to one of the open reading frames UL5, -8, -9, -20, -27-
 CC 29, -30, -42, -52 or IE175 of herpes simplex virus type 1 (HSV-1). These
 CC oligos pref. hybridise with a translation initiation site, a coding
 CC region or a 5' untranslated region. These oligos may be used in
 CC compositions for the treatment and diagnosis of herpes viral infection,
 CC by contacting the virus or the animal, or its cells, tissues or body
 CC fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 XX Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.8%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 87;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CTCGACCCCATCCCAACCCC 1266
 Db 24 CCCCAACCCCAACCCCAACCCC 3
 RESULT 140
 AAQ61902/c
 ID AAQ61902 standard; DNA; 24 BP.
 XX
 XX AC AAQ61902;
 XX
 XX 25-MAR-2003 (revised)
 DT 04-NOV-1994 (first entry)
 XX
 XX HSV replication inhibiting oligomer, ISIS no 5649.
 DE
 XX Inhibition; replication; herpes simplex virus; HSV; HIV;
 KW human cytomegalovirus; influenza virus; inflammation;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy;
 KW telomere length; retard; aging; ss.
 XX
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH misc_feature 1.24
 FT /*tag= a
 FT /note= "Phosphorothionate intersugar linkages"
 XX
 XX WO9408053-A1.
 PN
 XX 14-APR-1994.
 PD
 XX 29-SEP-1993; 93WO-US009297.
 PF
 XX 29-SEP-1992; 92US-00954185.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX WPI; 1994-135613/16.
 DR
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 PT
 XX Disclosure; Page 19; 144pp; English.
 PS
 XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
 CC which contain a G4 or two G3 stretches and which may be used for

CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
 CC such as these may also be used for inhibiting activity of HIV, human
 CC cytomegalovirus or influenza virus, or for treating inflammatory and
 CC neurological disorders caused by phospholipase A2 activity in cases of
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.
 CC They may also be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 87;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CTCGACCCCATCCCAACCCC 1266
 Db 24 CCCCAACCCCAACCCCAACCCC 3
 RESULT 141
 ID AAQ61990/c
 XX AC AAQ61990;
 XX 25-MAR-2003 (revised)
 DT 04-NOV-1994 (first entry)
 XX
 DE Guanine quartet containing oligomer, #1.
 XX
 KW Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
 KW human cytomegalovirus; influenza virus; inflammation; telomere length;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..24
 FT /*tag= a
 FT /note= "Phosphorothionate intersugar linkages"
 XX
 PN WO9408053-A1.
 XX
 PD 14-APR-1994.
 XX
 PF 29-SEP-1993; 93WO-US009297.
 XX
 PR 29-SEP-1992; 92US-00954185.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX
 DR WPI; 1994-135613/16.
 XX
 PT New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 XX
 PS Disclosure; Page 105; 144pp; English.
 XX
 CC The sequences given in AAQ61990-2001 are oligonucleotides which contain
 CC G4 or G3 stretches and which may be used for inhibiting replication of
 CC herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
 CC influenza virus, or for treating inflammatory and neurological disorders
 CC caused by phospholipase A2 activity in cases of hyper- proliferation,
 CC malignancy, cardiovascular disease and snake bite. Oligonucleotides such
 CC as these, may be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct PN field.)

XX
 SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 87;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CTCGACCCCATCCCAACCCC 1266
 Db 24 CCCCAACCCCAACCCCAACCCC 3
 RESULT 142
 ID AAQ61894/c
 XX AC AAQ61894;
 XX 25-MAR-2003 (revised)
 DT 04-NOV-1994 (first entry)
 XX
 DE HSV replication inhibiting oligomer, ISIS no 5651.
 XX
 KW Inhibition; replication; herpes simplex virus; HSV; HIV;
 KW human cytomegalovirus; influenza virus; inflammation;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy;
 KW telomere length; retard; aging; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..24
 FT /*tag= a
 FT /note= "Phosphorothionate intersugar linkages"
 XX
 PN WO9408053-A1.
 XX
 PD 14-APR-1994.
 XX
 PF 29-SEP-1993; 93WO-US009297.
 XX
 PR 29-SEP-1992; 92US-00954185.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX
 DR WPI; 1994-135613/16.
 XX
 PT New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 XX
 PS Claim 5; Page 19; 144pp; English.
 XX
 CC The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
 CC which contain a G4 or two G3 stretches and which may be used for
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
 CC such as these may also be used for inhibiting activity of HIV, human
 CC cytomegalovirus or influenza virus, or for treating inflammatory and
 CC neurological disorders caused by phospholipase A2 activity in cases of
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.
 CC They may also be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct PN field.)
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;
 Query Match 0.8%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 87;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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QY 1245 CTCGACCCCATCCCAACCCC 1266
DB 24 CCCCAACCCCAACCCCAACCCC 3

RESULT 143
AAQ61997/c
ID AAQ61997 standard; DNA; 24 BP.
XX
AC AAQ61997;
XX
XX 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
XX Guanine quartet containing oligomer, #8.
DE
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..24
FT /*tag= a
FT /note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecek RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
PT of chromosomes.
XX
XX Disclosure; Page 107; 144pp; English.
XX
XX The sequences given in AAQ61990-2001 are oligonucleotides which contain
CC G4 or G3 stretches and which may be used for inhibiting replication of
CC herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
CC influenza virus, or for treating inflammatory and neurological disorders
CC caused by phospholipase A2 activity in cases of hyper- proliferation,
CC malignancy, cardiovascular disease and snake bite. Oligonucleotides such
CC as these, may be used for inhibiting division of malignant cells by
CC modulating telomere length, which may also retard aging. (Updated on 25-
CC MAR-2003 to correct PN field.)
XX
XX Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 87;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCAACCCC 1266
DB 24 CCCCAACCCCAACCCCAACCCC 3

RESULT 144
AAQ97981/c
ID AAQ97981 standard; DNA; 24 BP.
XX
AC AAQ97981;
XX
XX 25-MAR-2003 (revised)
DT 19-OCT-1995 (first entry)
XX
XX Peptide nucleic acid oligomer targeting HIV gene.
DE
XX Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
KW antiviral; antisense; triple helix; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..24
FT /*tag= a
FT /note= "at least one (and preferably all) of the backbone
FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine
FT peptide residues, the nucleobase being attached
FT covalently to the acetyl group and the peptide linkage
FT being formed by condensation of the glycine carboxy group
FT of one residue with the amino group of the 2-aminoethyl
FT moiety in the next residue"
XX
XX WO9504068-A1.
XX
XX 09-FEB-1995.
XX
XX 28-JUL-1994; 94WO-US008517.
XX
XX 29-JUL-1993; 93US-00099718.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ecker DJ;
XX
XX WPI; 1995-082179/11.
XX
XX Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid
PT subunit - binds in complementary manner to DNA and RNA, and useful for
PT modulating HIV viral activity, e.g. in treating AIDS.
XX
XX Claim 2; Page 176; 186pp; English.
XX
XX New peptide nucleic acid (PNA) oligomers are provided which (a) consist
CC of naturally occurring nucleobases covalently bound to a polyamide
CC backbone and (b) hybridise to the translation initiation AUG region, 5'
CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice
CC junctions or coding sequence of a human immunodeficiency virus gene
CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target
CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene
CC regulation moieties. They have utility as gene-targeted drugs for
CC modulating HIV processes. Hence they can be used to treat AIDS and other
CC viral infections. They are also useful in diagnostic applications and as
CC research tools. PNA oligomers have high affinity for complementary single
CC stranded DNA. They are also able to form triple helices in which a first
CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the
CC resulting double helix or with the first PNA strand. The PNAs possess no
CC significant charge and are water soluble, which facilitates cellular
CC uptake. Further, since they contain amides of non-biological amino acids,
CC they are biostable and resistant to enzymatic degradation by proteases.
CC The present sequence is a specifically claimed PNA sequence (represented
CC by the sequence of nucleobases) targeting HIV genes. (Updated on 25-MAR-
CC 2003 to correct PN field.)
XX
XX Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 87;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCAACCCC 1266
DB 24 CCCCAACCCCAACCCCAACCCC 3

RESULT 144
AAQ97981/c

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Db      24  CCCAACCCCAACCCCAACCCC 3
RESULT 145
AAT39967/c
ID      AAT39967 standard; DNA; 24 BP.
XX
AC      AAT39967;
XX
DT      24-JUN-1997 (first entry)
XX
DE      Minimal motif coding sequence ZGS1/ZGS2.
XX
KW      Epstein-Barr virus; EBV; nuclear antigen; EBVNA1; antigenic protein;
KW      Glycine-rich repeat sequence; immune system; regulatory protein; enzyme;
KW      cytokine; lymphokine; cell adhesion molecule; costimulatory molecule;
KW      drug resistance; tumour suppressant; genetic disease; viral disease;
KW      enzyme disorder; Gaucher's disease; cancer; immune system disorder; GRRS;
KW      gene therapy; minimal motif; ds.
XX
OS      Synthetic.
XX
FH      Key      Location/Qualifiers
FT      misc_feature 1..4 /*tag= a
FT      /*note= "5' overhang"
FT      misc_feature complement(24)
FT      /*tag= b
FT      /*note= "5' overhang of TTCC"
XX
PN      WO9632483-A1.
XX
PD      17-OCT-1996.
XX
PF      10-APR-1996; 96WO-GB000876.
XX
PR      10-APR-1995; 95SE-00001324.
PR      01-SEP-1995; 95US-00522995.
PR      15-SEP-1995; 95US-00529190.
XX
PA      (MASU/) MASUCCI M.
XX
PI      Masucci M;
XX
DR      WPI; 1996-477134/47.
DR      P-PSDB; AAW05706.
XX
PT      New proteins containing GRRS which are invisible to the immune system -
PT      used for treating cancer, immune system disorders, viral diseases, etc.
XX
PS      Example 1; Page 43; 61pp; English.
XX
CC      AAT39966-T39973 represent double stranded coding sequences for minimal
CC      motifs of glycine-rich repeat sequences (GRRS). Full length GRRS
CC      sequences, such as the Epstein-Barr virus strain B95.8 nuclear antigen
CC      (EBNA1) represented by AAW05704, can be used in the method of the
CC      invention. The method of the invention is for making an antigenic protein
CC      invisible to the immune system, and consists of inserting a GRRS into the
CC      antigenic protein. The method can be used to insert a GRRS into
CC      therapeutic proteins, marker genes, regulatory proteins of viral vectors,
CC      or vaccine components. The therapeutic proteins include enzymes,
CC      cytokines, lymphokines, cell adhesion molecules, costimulatory molecules,
CC      or protein products of drug resistant genes or tumour suppressor genes.
CC      The antigenic proteins or corresponding nucleic acids are used to treat
CC      genetic and viral diseases, especially enzyme disorders such as Gaucher's
CC      disease, cancer, immune system disorders and other diseases treatable by
CC      gene therapy
XX
SQ      Sequence 24 BP; 4 A; 2 C; 14 G; 4 T; 0 U; 0 Other;
Query Match      0.8%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. NO. 87;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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```

Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY      1129 ACCTTCACCTCCAGCTCCACCT 1150
      ||| ||||| ||||| ||||| |||||
DB      24 ACCCGCACCTCCAGCTCCACCT 3
RESULT 146
AAV55813
ID      AAV55813 standard; DNA; 24 BP.
XX
AC      AAV55813;
XX
DT      27-AUG-2003 (revised)
DT      18-NOV-1998 (first entry)
XX
DE      Multimerisation of minimal motifs using primer ZGA2.
XX
KW      Fusion protein; stabilising polypeptide; proteolytic degradation;
KW      resistance; half-life; autoimmune disease; inflammation; nitro drug;
KW      IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;
KW      nitroreductase protein; enzyme therapy; prodrug therapy; protease;
KW      cancer; pathological condition; minimal motif; PCR primer; ss.
XX
OS      Synthetic.
OS      Human herpesvirus 4.
XX
PN      WO9822577-A1.
XX
PD      28-MAY-1998.
XX
PF      17-NOV-1997; 97WO-IB001508.
XX
PR      15-NOV-1996; 96US-0030986P.
PR      25-JUN-1997; 97US-0048945P.
XX
PA      (MASU/) MASUCCI M G.
XX
PI      Masucci MG;
XX
DR      WPI; 1998-312463/27.
XX
PT      New fusion proteins resistant to proteolytic degradation - comprising a
PT      core protein with a stabilising polypeptide comprising a peptide sequence
PT      containing glycine repeats.
XX
PS      Disclosure; Page 72; 120pp; English.
XX
CC      Sequences shown in AAV55812 to AAV55827 represent primers used in the
CC      course of the invention for the multimerisation of minimal motifs. The
CC      invention provides a method for increasing the resistance of a core
CC      protein to proteolytic degradation that comprises linking or inserting
CC      onto or into the core protein a stabilising polypeptide of formula
CC      [(Gly)X(Gly)Y(Gly)Z]n where Glya, Glyb, Glyc are 1-6 sequential Gly
CC      residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
CC      and n can be anything between 1-66. X, Y and Z need not be identical from
CC      n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
CC      polypeptide can be linked onto or inserted into a nucleic acid encoding a
CC      core protein. The fusion proteins of the invention are more resistant to
CC      degradation by proteases and, thus, have a longer half-life than the
CC      unfused core protein. The products can be used for treating autoimmune
CC      diseases, cancer and inflammation. In particular, the core protein may be
CC      an IkappaB regulator protein for the treatment of inflammatory bowel
CC      disease, or a nitroreductase protein which can activate nitro drugs in
CC      enzyme/prodrug therapy to treat cancer or other pathological conditions.
CC      The fusion proteins can also be used in diagnostic methods such as in
CC      vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ      Sequence 24 BP; 5 A; 14 C; 3 G; 2 T; 0 U; 0 Other;
Query Match      0.8%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. NO. 87;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```
QY 1126 TCCACCTTCACTCCAGCTCCA 1147
DE ||||| ||||| ||||| |||||
XX 2 TCCACCGCAGCTTCAGCACCA 23
Db

RESULT 147
ID ADB68048/c
XX ADB68048 standard; DNA; 24 BP.
AC ADB68048;
XX
DT 04-DEC-2003 (first entry)
XX
DE G4 phosphorothioate oligonucleotide 2 used to modulate telomere length.
XX telomere length; aging; hyperproliferative condition; cancer; ss; G4.
KW
XX Unidentified.
OS
XX US2003096776-A1.
PN
XX 22-MAY-2003.
PD
XX
PF 02-JAN-2002; 2002US-00038335.
XX
XX 29-SEP-1992; 92US-00954185.
PR
XX 29-SEP-1993; 93WO-US009297.
PR
XX 12-JUN-1995; 95US-00403888.
PR
XX 23-APR-1999; 99US-00299056.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hancak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
PI Ecker DJ, Vickers TA, Wyatt JR;
PI
XX WPI; 2003-606442/57.
DR
XX
XX New chemically modified oligonucleotides, useful for modulating telomere
PT length of a mammalian chromosome, inhibiting the division of a malignant
PT mammalian cell, or modulating the effects of aging of a mammalian cell.
XX
XX Example 2; Page 8; 10pp; English.
PS
XX The invention relates to a novel chemically modified oligonucleotide
CC having no more than about 27 nucleic acid base units. The oligonucleotide
CC modulates mammalian telomere length. The chemically modified
CC oligonucleotide of the invention may be useful for modulating the
CC telomere length of a mammalian chromosome, inhibiting the division of a
CC malignant mammalian cell or modulating the effects of aging of a
CC mammalian cell. The oligonucleotides may also be useful for treating
CC diseases associated with abnormal telomere length such as aging and
CC hyperproliferative conditions including cancer. The current sequence is
CC that of the G4 phosphorothioate oligonucleotide 2 of the invention which
CC was used to modulate telomere length.
XX
XX Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 87;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCAACCCC 1266
DE ||||| ||||| ||||| |||||
XX 24 CCCCACCCCAACCCCAACCCC 3
Db

RESULT 148
ABT05122/c
ID ABT05122 standard; DNA; 18 BP.
XX
XX ABT05122;
XX
```

```
DT 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 152.
DE
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
XX Homo sapiens.
OS
XX WO200248168-A1.
PN
XX 20-JUN-2002.
PD
XX
XX 22-OCT-2001; 2001WO-US051224.
PF
XX
XX 24-OCT-2000; 2000US-00695451.
PR
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
PI
XX WPI; 2002-583481/62.
DR
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
PS
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
XX Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 38;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1169 CCAACTTTGCGGCTCCC 1185
DE ||||| ||||| ||||| |||||
XX 17 CCAACTTTGCGGCTCCC 1
Db

RESULT 149
ABK68350
ID ABK68350 standard; DNA; 21 BP.
XX
XX ABK68350;
XX
XX 02-JUL-2002 (first entry)
DT
XX
XX Mouse HYPLIP1 locus specific primer 412D2T #1.
DE
XX
XX Mouse; primer; antilipemic; cardiant; hypotensive; anorectic; HYPLIP1;
KW FCHL1; lipid disorder; familial combined hyperlipidaemia;
KW coronary artery disease; atherogenic lipoprotein phenotype; cancer;
KW hyperapobetalipoproteinaemia; hypertriglyceridaemia; obesity; ss;
KW familial dyslipidaemic hypertension; syndrome X; insulin resistance;
KW hypercholesterolaemia; chromosome 3.
XX
XX Mus sp.
OS
XX
```


PN WO200220847-A2.
XX 14-MAR-2002.
XX 07-SEP-2001; 2001WO-US028181.
XX 08-SEP-2000; 2000US-0231322P.
XX (REGC) UNIV CALIFORNIA.
XX Bodnar JS, Castellani LM, Chatterjee A, De Jong P, Lusis AJ;
XX Ohmen J, Ross D, Tafuri S, Wu C;
XX WPI; 2002-339808/37.
XX Novel HYPLIP1 and FCHL1 genes and their sequence variations associated
XX with lipid disorder and cancer, useful for prognosis, diagnosis and
XX treatment of lipid disorders.
XX Claim 11; Page 77; 102pp; English.
XX This invention relates to the cDNA and protein sequences of novel
XX proteins HYPLIP1 or FCHL1 and to sequence variations within these genes
XX that have been shown to be associated with lipid disorders.
XX Oligonucleotide probes that hybridise to the cDNA sequence are useful for
XX analysing the expression of FCHL1 by detecting the expression of the mRNA
XX transcript in the sample. A host cell transformed with the cDNA of the
XX invention is useful for producing the protein by recombinant means.
XX Pharmaceutical compositions based on the sequences of the invention are
XX useful for treating or preventing a lipid disorder associated with
XX expression of FCHL1 such as familial combined hyperlipidaemia, coronary
XX artery disease, atherogenic lipoprotein phenotype,
XX hyperapobetalipoproteinemia, hypertriglyceridaemia, familial
XX dyslipidaemic hypertension, syndrome X, obesity, insulin resistance and
XX hypercholesterolaemia. The cDNA sequence is useful in the diagnosis or
XX prognosis of predisposition to lipid disorders and cancers, and also to
XX identify a molecule which enhances or decreases the HYPLIP1 or FCHL1
XX activity. The present sequence represents an oligonucleotide primer
XX specific for the mouse HYPLIP1 locus of the invention. The mouse HYPLIP1
XX locus is situated on chromosome 3
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 72;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 866 GCACTGAGGACTCAGGCACC 885
DB 1 GCTCTGAGGACTCAGGCCTCC 20
RESULT 150
ID AAL49018
XX AAL49018 standard; DNA; 21 BP.
XX AAL49018;
XX 29-OCT-2002 (first entry)
XX Murine Spot14 coding sequence probe #1.
XX Protein-tyrosine phosphatase 1B; PTP1B; type 2 diabetes; inhibitor;
XX insulin resistance; mouse; phosphatidylinositol-3-kinase; PI3-K;
XX antidiabetic; probe; Spot14; ss.
XX Mus sp.
XX WO200264840-A2.
XX 22-AUG-2002.
XX 13-FEB-2002; 2002WO-US004194.
PF

XX 13-FEB-2001; 2001US-0268399P.
XX 12-FEB-2002; 2002US-00074194.
XX (ABBO) ABBOTT LAB.
XX (ISIS-) ISIS PHARM INC.
XX Zinker BA, Trevillyan JM, Jirousek MR, Rondinone CW, Cowsett LM;
XX Wyatt J, Monia BP, Butler MM, Waring JF;
XX WPI; 2002-636634/68.
XX Identifying inhibitors of protein tyrosine phosphatase 1B, useful for
XX identifying compounds for treating diabetes, by measuring the levels of
XX the p85-alpha, p50-alpha and p55-alpha isoforms of the
XX phosphatidylinositol-3-kinase.
XX Example 9; Page 22; 72pp; English.
XX The present invention relates to a method of identifying test compounds,
XX which inhibit or downregulate protein tyrosine phosphatase 1B (PTP1B)
XX expression in the liver or fat of a non-human mammal. This comprises
XX measuring the downregulation of the p85alpha regulatory subunit of the
XX phosphatidylinositol-3-kinase (PI3-K), and the upregulation of the
XX p50alpha and/or p55alpha isoforms of PI3-K in the liver or fat. The
XX method is useful for identifying inhibitors or downregulators of PTP1B
XX expression in the liver or fat of a non-human mammal, compounds that
XX increase insulin sensitivity and reduce blood glucose in an insulin
XX resistant non-human mammal, or compounds that downregulate the level of
XX expression of at least one gene involved in lipogenesis or
XX gluconeogenesis. These compounds are useful for treating type 2 diabetes.
XX The present sequence is a probe for the murine Spot14 coding sequence
XX used in the exemplification of the invention
SQ Sequence 21 BP; 3 A; 10 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 72;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1120 CCCAGTTCACCTTCACCTC 1139
DB 1 CCCAGTTCACCTTCACCTTC 20
RESULT 151
ID ABK71254
XX ABK71254 standard; DNA; 21 BP.
XX AC ABK71254;
XX 15-JUL-2002 (first entry)
XX Mouse HYPLIP1 locus PCR primer #327.
XX Human; mouse; HYPLIP1; FCHL1; familial combined hyperlipidaemia; cancer;
XX lipid disorder; PCR; primer; ss.
XX Mus sp.
XX WO200220848-A2.
XX 14-MAR-2002.
XX 07-SEP-2001; 2001WO-US028182.
XX 08-SEP-2000; 2000US-0231322P.
XX (REGC) UNIV CALIFORNIA.
XX Bodnar JS, Castellani LM, Chatterjee A, De Jong P, Lusis AJ;
XX Ohmen J, Ross D, Tafuri S, Wu C;
XX

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DR WPI; 2002-329882/36.
XX New mouse HYPLIP1 and human FCHL1 (familial combined hyperlipidemia)
PT genes and their sequence variations, useful for diagnosing, treating or
PT preventing lipid disorders and cancers.
XX
XX Claim 11; Page 77; 102pp; English.
XX
CC The invention relates to an isolated polynucleotide comprising a sequence
CC variation of a mouse HYPLIP1 cDNA or a human FCHL1 (familial combined
CC hyperlipidaemia) gene. The FCHL1 polynucleotide, the FCHL1 polypeptide or
CC antibody immunoreactive to the FCHL1 polypeptide are useful for treating
CC or preventing cancer associated with expression of FCHL1, as well as for
CC treating lipid disorder. The mouse HYPLIP1 cDNA or human FCHL1 gene are
CC also useful for diagnosing or proposing a predisposition to lipid
CC disorder and cancer. ABK70902-ABK71303 represent mouse HYPLIP1, human
CC FCHL1 coding sequences and PCR primers of the invention
XX
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 72;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 866 GCACCTGAGGACTCAGGCACC 885
DB 1 GCTCTGAGGACTCAGGCTCC 20
RESULT 152
ADAL5393
ID ADAL5393 standard; DNA; 21 BP.
XX
AC ADAL5393;
XX
DT 06-NOV-2003 (first entry)
XX
DE Mouse HYPLIP1 locus PCR primer #333.
XX
KW Mouse; PCR; primer; ss; HYPLIP1; FCHL1; variation; lipid disorder;
KW allele; anti-lipid disorder; anti-cancer therapy; gene therapy;
KW familial combined hyperlipidaemia; coronary artery disease;
KW atherogenic lipoprotein phenotype; hyperapobetalipoproteinaemia;
KW hypertriglyceridaemia; low density lipoprotein subclass B; LDL;
KW familial dyslipidemic hypertension; syndrome X; hypercholesterolaemia;
KW obesity; insulin resistance; cancer; cytostatic; antilipemic;
KW hypotensive; anorectic.
XX
OS Mus sp.
XX
XX US2003064372-A1.
XX
XX 03-APR-2003.
XX
XX 07-SEP-2001; 2001US-00949428.
XX
XX 22-JUN-2000; 2000US-0213322P.
XX
XX (BODN/) BODNAR J S.
XX
XX (CAST/) CASTELLANI L W.
XX
XX (CHAT/) CHATTERJEE A.
XX
XX (JONG/) JONG P D.
XX
XX (LUSI/) LUSIS A J.
XX
XX (OHME/) OHMEN J.
XX
XX (ROSS/) ROSS D.
XX
XX (TAFU/) TAFURI S.
XX
XX (WUCC/) WU C.
XX
XX Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusis AJ;
XX Ohmen J, Ross D, Tafuri S, Wu C;
XX WPI; 2003-540780/51.
XX

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PT Novel isolated polynucleotide comprising a mouse or human familial
PT combined hyperlipidemia 1 gene having a variation that is associated with
PT a lipid disorder, useful for identifying susceptibility to the lipid
PT disorder.
XX
XX Claim 11; Page 40; 63pp; English.
XX
XX The invention discloses isolated polynucleotides comprising mouse HYPLIP1
XX cDNA sequence, mouse HYPLIP1 genomic DNA, or the homologous human
XX familial combined hyperlipidaemia 1 (FCHL1) gene, where a variation in
XX the sequence is associated with a lipid disorder. Also claimed is an
XX isolated polypeptide comprising a variant form of the mouse HYPLIP1 amino
XX acid sequence, or a variant form of a fully defined human FCHL1 amino
XX acid sequence, where the variant is associated with the lipid disorder,
XX an isolated polynucleotide having at least 12 contiguous nucleotides of
XX the isolated polynucleotides, where the 12 contiguous nucleotides span
XX the variation position, an isolated polypeptide comprising 4 contiguous
XX amino acids of the encode polypeptides, where the 4 contiguous amino
XX acids span the variation position, a kit for the detection of the FCHL1
XX locus comprising, an isolated antibody, identifying susceptibility to a
XX lipid disorder which comprises comparing the nucleotide sequence of the
XX suspected FCHL1 allele with a wild-type FCHL1 nucleotide sequence, where
XX the difference between the suspected allele and the wild-type sequence
XX identifies a sequence variation of FCHL1 nucleotide sequence and a
XX pharmaceutical composition. Also disclosed is a transgenic animal which
XX carries an altered HYPLIP1 or FCHL1 allele and a method for screening
XX drugs for inhibition or restoration of FCHL1 gene function as an anti-
XX lipid disorder or anti-cancer therapy. The polynucleotides, polypeptides
XX and antibodies are useful for treating or preventing (e.g. gene therapy)
XX a lipid disorder associated with expression of FCHL1, for diagnosis or
XX prognosis of predisposition to lipid disorder, and cancer and for
XX treating a lipid disorder such as familial combined hyperlipidaemia,
XX coronary artery disease, atherogenic lipoprotein phenotype,
XX hyperapobetalipoproteinaemia, hypertriglyceridaemia, low density
XX lipoprotein (LDL) subclass B, familial dyslipidemic hypertension,
XX syndrome X, hypercholesterolaemia, obesity, insulin resistance and
XX cancer. The sequence presented is a PCR primer which was used to amplify
XX part of the mouse HYPLIP1 locus.
XX
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 72;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 866 GCACCTGAGGACTCAGGCACC 885
DB 1 GCTCTGAGGACTCAGGCTCC 20
RESULT 153
ADB95955
ID ADB95955 standard; DNA; 21 BP.
XX
AC ADB95955;
XX
XX 04-DEC-2003 (first entry)
XX
XX Mouse HYPLIP1 PCR primer #333.
XX
XX cytostatic; antilipemic; gene therapy; peptide therapy; HYPLIP1; FCHL1;
XX cancer; metabolic pathway; cellular mechanism; lipid disorder;
XX familial combined hyperlipidaemia; mouse; PCR; primer; ss.
XX
XX Mus sp.
XX
XX US2003054418-A1.
XX
XX 20-MAR-2003.
XX
XX 07-SEP-2001; 2001US-00949427.
XX
XX 08-SEP-2000; 2000US-0231322P.
XX

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```

XX (BODN/) BODNAR J S.
PA (CAST/) CASTELLANI L W.
PA (CHAT/) CHATTERJEE A.
PA (JONG/) JONG P D.
PA (LUSI/) LUSIS A J.
PA (OHME/) OHMEN J.
PA (ROSS/) ROSS D.
PA (TAFU/) TAFURI S.
PA (WUCC/) WU C.
XX Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusis AJ;
PI Ohmen J, Ross D, Tafuri S, Wu C;
XX WPI; 2003-695901/66.
XX Novel human FCHLI or mouse HYPLIPI polypeptide, useful for drug
PT screening, peptide therapy of lipid disorder or cancer.
XX Claim 11; Page 39; 56pp; English.
XX The invention describes an isolated polypeptide (I) comprising a variant
CC form of a mouse HYPLIPI polypeptide sequence (S1) or a human FCHLI
CC polypeptide sequence (S2), not given in the specification, where the
CC variant form is associated with cancer, or an amino acid sequence having
CC at least 65 % sequence identity to (S1) or (S2). A composition comprising
CC DNA encoding (I) is useful for treating or preventing cancer associated
CC with expression of FCHLI. FCHLI gene or HYPLIPI gene and its product are
CC useful for the study of metabolic pathway and cellular mechanism to
CC identify other genes, receptors and relationships that contribute to
CC lipid disorder and cancer. FCHLI gene or its fragments are useful in gene
CC therapy to increase the amount of the expression products of the gene for
CC the treatment of lipid disorder or cancerous cells. The sequence
CC variation of FCHLI gene or HYPLIPI gene is also useful in the diagnosis
CC and prognosis of predisposition to lipid disorder and cancer. Antisense
CC polynucleotide sequences are useful in preventing or diminishing the
CC expression of HYPLIPI or FCHLI locus. This sequence represents a primer
CC used in the analysis of the mouse HYPLIPI gene.
XX Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 72;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 866 GCATGAGGACTCAGGCACC 885
DB 1 GCTCTGAGGACTCAGGCTCC 20
RESULT 154
ABT05121/c
XX ID ABT05121 standard; DNA; 18 BP.
XX AC ABT05121;
XX DT 11-OCT-2002 (first entry)
XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 151.
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowsert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 18; Page 56; 121pp; English.
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 55;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1167 TCCCACTTTCGGGCTCC 1184
DB 18 TACCACTTTCGGGCTCC 1
RESULT 155
AAH62672
XX ID AAH62672 standard; DNA; 21 BP.
XX AC AAH62672;
XX DT 12-SEP-2001 (first entry)
XX DE Glucosidase alpha acid polymorphism containing DNA fragment #573.
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW heart disease; paternity testing; forensic science; ds.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT Variation replace(11,T)
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"
XX PN WO200138576-A2.
XX PD 31-MAY-2001.
XX PF 17-NOV-2000; 2000WO-US031639.
XX PR 24-NOV-1999; 99US-0167334P.
XX (WHEd ) WHITEHEAD INST BIOMEDICAL RES.
XX Cargill M, Ireland JS, Lander ES;
XX WPI; 2001-367705/38.
XX New nucleic acid segments of the human genome, particularly from genes
PT including polymorphic sites, for phenotype correlation, forensics,

```

PT paternity testing, medicine and genetic analysis.
XX Claim 1; Page 76; 80pp; English.
PS
CC DNA sequences AAH62100 - AAH62688 represent segments of human genes which
CC contain single nucleotide polymorphisms (SNPs). A method is included in
CC the invention for analysing a nucleic acid sample, which consists of
CC determining the base occupying any one of the polymorphic sites given in
CC the SNP containing sequences. The nucleotide sequences can be used in the
CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
CC diseases, diseases of the cardiovascular system, and infection by
CC microorganisms. The oligonucleotides are also useful in the manufacture
CC of a medicament for the treatment or prophylaxis of the diseases, and as
CC a pharmaceutical. SNP containing oligonucleotides are useful in
CC applications such as phenotype correlation, forensics, paternity testing,
CC medicine and genetic analysis
XX
SQ Sequence 21 BP; 5 A; 11 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1e+02; 3; Indels 0; Gaps 0;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1126 TCACCTTCACCTCCAGCTCC 1146
Db 1 TCCACTTCACCTACAGCCCC 21
RESULT 156
ABT05123/c
ID ABT05123 standard; DNA; 18 BP.
XX
AC ABT05123;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 153.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PS (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnosis, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a mouse oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18; Page 56; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for

CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1224 CATCTTCGACAGCC 1239
Db 18 CATCTTCGACAGCC 3
RESULT 157
ABT05169/c
ID ABT05169 standard; DNA; 20 BP.
XX
AC ABT05169;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 199.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW mouse; murine; ds.
XX
OS Mus sp.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PS (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
CC Novel antisense compound targeted to nucleic acid molecule encoding tumour
CC necrosis factor receptor 1 (TNFR1), useful for treating humans having
CC disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 21; Page 61; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnosis, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a mouse oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 827 GCACGAGTGTGCCTACC 845
Db 20 GTATGAAGTGTGCCTACC 2

RESULT 158
ABT05171/c
ID ABT05171 standard; DNA; 20 BP.
XX
XX AC ABT05171;
XX
XX AC
DT 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 201.
DE
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW mouse; murine; ds.
XX
XX OS Mus sp.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
PD
XX
XX 22-OCT-2001; 2001WO-US051224.
PF
XX
XX 24-OCT-2000; 2000US-00695451.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Baker BF, Cowseert LM, Zhang H, Dean NM;
PI WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 21; Page 61; 121pp; English.
PS
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a mouse oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.7%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.1e-02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 914 TTGCTCTTGGCTTTATC 932
Db 19 TAGGTCTTTGGCTTTATC 1
RESULT 159
ABZ87732/c
ID ABZ87732 standard; DNA; 20 BP.
XX
XX AC ABZ87732;
XX
XX 17-OCT-2003 (first entry)
DT
XX Human oligonucleotide sequence.
DE
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013135.
PF
XX
XX 24-APR-2001; 2001US-0286137P.
PR
XX
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI
XX
XX WPI; 2003-229219/22.
DR
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 2974; 872pp; English.
PS
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 1 A; 1 C; 15 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.1e-02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1250 ACCCCATCCCCACCCCT 1268
Db 20 ACCCCATCCCCACCCCT 2
RESULT 160
ACF39510
ID ACF39510 standard; DNA; 20 BP.
XX
XX AC ACF39510;
XX
XX 26-SEP-2003 (first entry)
DT
XX BARCODE-MAT HPV related GVP1 probe HPV11L1.
DE
XX Simultaneous detection; multiple target nucleic acid molecule;
KW

KW biological sample; Exonuclease I; PCR; human papillomavirus; HPV;
 KW BARCODE-MT; acute lymphoblastic leukaemia; cancer; assay;
 KW bead array coded detection of multiple target; microarray;
 KW targeted genetic risk-stratification; primer; probe; ss.
 XX
 OS Human papillomavirus.
 OS Synthetic.
 XX WO2003054149-A2.
 PN
 XX
 PD 03-JUL-2003.
 XX
 XX 06-DEC-2002; 2002WO-US039223.
 XX PF
 XX 07-DEC-2001; 2001US-0338442P.
 XX PR
 XX 05-NOV-2002; 2002US-0423793P.
 XX PR
 XX (UYMA-) UNIV MASSACHUSETTS.
 PA
 XX Pihan G;
 PI
 XX
 XX WPI; 2003-559133/52.
 DR
 XX
 XX Simultaneously detecting the presence of multiple target nucleic acid
 PT molecules in a biological sample for optimizing risk-adapted therapy for
 PT a disorder by treating the enriched target nucleic acid molecules with
 PT Exonuclease I.
 PT
 XX
 XX Example 2; Fig 7; 4ipp; English.
 PS
 XX
 XX The present invention describes a method for simultaneously detecting the
 CC presence of multiple target nucleic acid molecules in a biological sample
 CC comprising: (a) isolating and enriching target nucleic acid molecules
 CC from the biological sample; (b) treating the enriched target nucleic acid
 CC molecules with Exonuclease I; (c) performing linear PCR on the
 CC Exonuclease I treated enriched target nucleic acid molecule to produce
 CC linear PCR product where only a single primer is used; (d) obtaining
 CC beads coupled to an oligonucleotide molecule complementary to the
 CC amplified target nucleic acid molecules; (e) forming a mixture by mixing
 CC the beads and the enriched linear PCR product nucleic acid; (f) forming a
 CC reacted sample by incubating the mixture under conditions where if the
 CC enriched linear PCR product will hybridise to the oligonucleotide
 CC molecule; (g) analysing the reacted sample by determining the
 CC fluorescence of each bead analysed; and (h) detecting a level of
 CC fluorescence on the beads, where the level of fluorescence corresponds to
 CC a level of a target nucleic acid molecule in the biological sample. The
 CC method for simultaneously detecting the presence of multiple target
 CC nucleic acid molecules in a biological sample or for optimising risk-
 CC adapted therapy for a disorder associated with the target nucleic acid.
 CC ACF39439 to ACF39597 represent primers and probes used in the
 CC exemplification of the present invention
 XX
 XX Sequence 20 BP; 11 A; 6 C; 2 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 1.1e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1002 GAAATCGACACTGAAAA 1020
 DB 2 GAAACCCACACTGAAAA 20
 RESULT 161
 AAV51522
 ID AAV51522 standard; DNA; 22 BP.
 XX
 XX AAV51522;
 AC
 XX
 DT 02-FEB-1999 (first entry)
 XX
 XX Zea mays genome forward PCR primer #122.

XX Polymorphic marker; allele-specific; probe; amplification; PCR primer;
 KW hybridisation; plant; hybrid certification; genetic contribution;
 KW progeny; back-cross; hybrid; ancestry; corn; ss.
 XX
 OS Synthetic.
 OS Zea mays.
 XX WO9824796-A1.
 PN
 XX 11-JUN-1998.
 PD
 XX 01-DEC-1997; 97WO-US021782.
 XX PF
 XX 02-DEC-1996; 96US-0032069P.
 XX PR
 XX 07-MAR-1997; 97US-00813507.
 XX PR
 XX (AFFY-) AFFYMETRIX INC.
 PA
 XX Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;
 PI
 XX WPI; 1998-333252/29.
 DR
 XX
 XX Brassica species allele-specific oligonucleotide probes and primers -
 PT useful for plant breeding.
 PT
 XX
 XX Example 1; Page 52; 65pp; English.
 PS
 XX
 XX AAV51401-V51704 are forward PCR primers used to amplify fragments of the
 CC Zea mays genome in order to detect polymorphic markers. Such markers can
 CC be used in the construction of allele-specific primers and probes for
 CC amplification or hybridisation, e.g. to determine common or disparate
 CC ancestry between 2 or more plants, to monitor the genetic contribution of
 CC an ancestral plant, to trace the progeny of proprietary plants, in
 CC certification of a hybrid plant or to identify the progeny of a back-
 CC crossed plant with an ancestral plant
 CC
 XX Sequence 22 BP; 2 A; 3 C; 7 G; 10 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 15.8; DB 1; Length 22;
 Best Local Similarity 89.5%; Pred. No. 1.6e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 902 TGGTCATTCTCTTTGGTCT 920
 DB 4 TGGTCATTCTCTTTGGTCT 22
 RESULT 162
 AAD54478/c
 ID AAD54478 standard; DNA; 22 BP.
 XX
 XX AAD54478;
 AC
 XX
 XX 26-JUN-2003 (first entry)
 DT
 XX Human BCMP 101 DNA amplifying sense PCR primer #2.
 DE
 XX Human; BCMP 101 protein; breast cancer; medicine; vaccine; prophylaxis;
 KW gene therapy; antisense therapy; kidney cancer; cytostatic; PCR; primer;
 KW ss.
 XX
 XX Homo sapiens.
 OS
 XX WO2002102849-A2.
 PN
 XX 27-DEC-2002.
 PD
 XX
 XX 14-JUN-2002; 2002WO-GB002782.
 XX PF
 XX 15-JUN-2001; 2001GB-00014643.
 XX PR
 XX 06-MAR-2002; 2002GB-00005264.
 XX PR
 XX

(OXFO-) OXFORD GLYSCSCIENCES UK LTD.
Terrett JA;
WPI; 2003-157027/15.
Novel BCMP101 polypeptide and polynucleotide encoding the polypeptide, useful in diagnosis, prophylaxis and treatment of breast cancer and/or kidney cancer, preferably breast cancer.
Example 3; Page 46; 47pp; English.
The present invention relates to novel human BCMP101 proteins and their corresponding polynucleotides. BCMP 101 sequences are useful to screen for agents that interact with BCMP101 and for screening for and/or the diagnosis of breast cancer or monitoring and/or assessing breast cancer treatment in a subject. They are also useful in medicine and in the preparation of medicaments (e.g. vaccines) for use in prophylaxis and/or treatment of breast cancer. Sequences of the invention are also useful in gene therapy. BCMP 101 sequences are useful in antisense therapy for treating breast cancer and/or kidney cancer. The present sequence is human BCMP 101 DNA amplifying PCR primer. This sequence is used in the exemplification of the invention
SQ Sequence 22 BP; 2 A; 9 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 15.8; DB 1; Length 22;
Best Local Similarity 89.5%; Pred. No. 1.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1179 GGCTCCCGCGAGAGGTG 1197
DB 21 GGCTACCGCGAGAGGTG 3
RESULT 163
AAAT71903
ID AAA71903 standard; DNA; 22 BP.
AC AAA71903;
DT 12-JAN-2001 (first entry)
DE Soybean RRS gene NS region primer P3 #1.
KW RRS gene; roundup ready soya; plant; soybean; transgenic; food;
KW food product; NS region; primer; ss.
OS Glycine max.
XX DE19906169-Al.
XX 10-AUG-2000.
XX 08-FEB-1999; 99DE-01006169.
XX 08-FEB-1999; 99DE-01006169.
XX (BIOT-) BIOINSIDE GES BIODIAGNOSTIK AUFTRAGSFORS.
XX Lauter F, Grohmann L, Staesche R;
XX WPI; 2000-533917/49.
XX Quantitative determination of genetically modified DNA in food, useful particularly for detecting Roundup Ready soya, by fluorescence-coupled polymerase chain reaction.
XX Claim 7; Page 10; 14pp; German.
XX This invention describes a novel method for the quantitative determination of genetically modified DNA (transgene, (I)) in foods by fluorescence-coupled polymerase chain reaction (PCR) based on extraction of total DNA from the food sample. The amount of (I) is determined by PCR, in a first reaction vessel, using two (I)-specific primers (P1, P2) and a (I)-specific fluorescent probe (S1), and the change in fluorescence measured relative to a control. The internal amplification control (C1) is a synthetic gene fragment having two binding sites for P1 and P2 and a binding site for a fluorescently labeled probe (S2) that differs from S1 both in sequence and nature of its fluorescent label. In a second reaction vessel a reference gene (II) in (A) is measured similarly, using a probe (S3) and (II)-specific primers (P3, P4), with the change in fluorescence measured relative to a second control (C2) that has binding sites for P3, P4 and S2. S3 differs in both sequence and label from S2. The proportion of genetically altered DNA is then calculated from the ratio of amount of (I) to amount of (II). The method is especially used to detect Roundup Ready soya (RRS) in foods and food products, but may be applied to other transgenes in plants, e.g. the Bt-176 gene in transgenic maize. The method avoids risks of contamination and is highly automatable, reproducible, sensitive and specific. This sequence represents a primer used to detect the NS region from the RRS gene which is used in the method of the invention
SQ Sequence 22 BP; 3 A; 14 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 1.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1237 GCCTCGCTCGAGCCCATCC 1258
DB 1 GCCTCTACTCCACCCCATCC 22
RESULT 164
AAAX82809
ID AAX82809 standard; DNA; 22 BP.
XX AAX82809;
AC AAX82809;
DT 29-JUN-2000 (first entry)
DE Soybean cytochrome b PCR primer 1U.
KW Cytochrome b; soybean; PCR primer; forensic; raw materials; cosmetic;
KW contamination; ss.
OS Glycine max.
XX DE19842991-Al.
XX 23-MAR-2000.
XX 21-SEP-1998; 98DE-01042991.
XX 21-SEP-1998; 98DE-01042991.
XX (BEHR/) BEHRENS M.
XX (UNTH/) UNTHAN M.
XX (LATU/) LATUS N.
XX Behrens M, Unthan M, Latus N;
XX WPI; 2000-257940/23.
XX Novel methods and primers for genetic analysis of biological material by polymerase chain reaction using specific primer pairs useful in, e.g. forensic medicine.
XX Claim 7; Col 5; 10pp; German.
XX This invention describes a novel method for determining the origin of biological material by PCR using specific primers pairs, which are exclusively complementary to the respective animal or plant DNA. The method and primers are useful in forensic medicine or in purity testing raw materials, end products, cosmetics or pharmaceuticals. The methods

CC are useful for determining if there has been contamination of biological
 CC materials. AAX82791-X82812 represent the PCR primers used to illustrate
 CC the method of the invention

XX SQ Sequence 22 BP; 3 A; 14 C; 1 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.8e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1237 GCCCTGCGCTCCGACCCCATCC 1258
 Db 1 GCCCTCTACTCCACCCCATCC 22

RESULT 165

ACC69308

ID ACC69308 standard; DNA; 22 BP.

XX AC

XX ACC69308;

XX 15-JUL-2003 (first entry)

XX RRS nucleic acid fragment related PCR primer Le1n01 5' SEQ ID NO:3.

XX Quantitative; determination; genetically-modified agricultural product;
 XX soybean; maize; RRS; roundup ready soybean; PCR primer; ss.

XX Glycine max.

XX Synthetic.

XX WO2003027283-A1.

XX 03-APR-2003.

XX 24-SEP-2002; 2002WO-JP009773.

XX 21-SEP-2001; 2001JP-00289755.

XX (NORO) NAT FOOD RES INST MIN AGRIC.

XX (SHOS) SHOWA SANGYO CO.

XX (NIFL-) NIPPON FLOUR MILLS CO LTD.

XX Katoh H, Ohhashi H, Hino A, Matsuoka T, Kuribara H, Futo S;

XX WPI; 2003-363215/34.

XX Competitive nucleic acid fragments applicable in quantifying recombinant
 XX genes by PCR, useful in identifying genetically-modified agricultural
 XX products and similar materials e.g. soybean and maize.
 PS Example 1; Page 11; 39pp; Japanese.

XX The present invention describes a competitive nucleic acid fragment which
 XX contains at least one first competitive nucleic acid molecule
 XX corresponding to the endogenous gene moiety of a recombinant gene which
 XX is bonded to at least one second competitive nucleic acid molecule
 XX corresponding to a gene specific to the recombinant gene moiety of the
 XX recombinant gene located on the same nucleic acid. Also described: (1) a
 XX kit for quantifying the gene of a recombinant gene containing the
 XX competitive nucleic acid fragment, a first pair of primers for amplifying
 XX the first competitive nucleic acid molecule of the endogenous gene of the
 XX gene of such recombinant gene, and a second pair of primers for
 XX amplifying the second competitive nucleic acid molecule of the recombinant
 XX gene of the gene of such recombinant gene; and (2) quantifying the gene
 XX of a gene recombinant by carrying out competitive PCR with use of the
 XX competitive nucleic acid fragment or the kit. The nucleic acid fragments
 XX are useful in identifying genetically-modified agricultural products and
 XX similar materials e.g. soybean and maize. The present sequence represents
 XX a PCR primer used in the amplification of an RRS (roundup ready soybean)
 XX nucleic acid fragment, which is used in an example from the present
 XX invention

SQ Sequence 22 BP; 3 A; 14 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 1.8e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1237 GCCCTGCGCTCCGACCCCATCC 1258

Db 1 GCCCTCTACTCCACCCCATCC 22

RESULT 166

AAX74507/C

ID AAX74507 standard; RNA; 17 BP.

XX AC

XX AAX74507;

XX 28-JUL-1999 (first entry)

XX Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #35.

XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;

XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;

XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;

XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;

XX foetal liver kinase 1; ss.

XX Mus sp.

XX WO9715662-A2.

XX 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.

XX 26-OCT-1995; 95US-0005974P.

XX 11-JAN-1996; 96US-00584040.

XX (RIBO-) RIBOZYME PHARM INC.

XX (CHIR) CHIRON CORP.

XX Pavco P, Meswigen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 XX rheumatoid arthritis, etc., in a human patient.
 PS Claim 4; Page 156; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the
 XX synthesis, expression and/or stability of a mRNA encoding 1 or more
 XX receptors of vascular endothelial growth factor (VEGF). A patient
 XX (preferably human) having a condition associated with the level of the
 XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 XX treated by administering the nucleic acid molecule or the expression
 XX vector to the patient. AAX67275 to AAX75752 represent specific examples
 XX of nucleic acid molecules from the present invention

SQ Sequence 17 BP; 7 A; 2 C; 7 G; 0 T; 1 U; 0 Other;

Query Match

Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 921 TTGCTTTTATCCCTCC 937

Db 17 TTGCTTTTATCCCTCC 1

RESULT 167
 ACD50663
 ID ACD50663 standard; RNA; 17 BP.
 XX AC ACD50663;
 XX
 DT 23-SEP-2003 (first entry)
 XX
 DE HBV hammerhead ribozyme substrate sequence #180.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis B virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 WI; 2003-229207/22.
 DR
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 PS Example 1; Page 139; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or amberyne sequences
 CC disclosed in the present invention
 XX

SQ Sequence 17 BP; 1 A; 2 C; 2 G; 0 T; 12 U; 0 Other;
 Query Match 0.7%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 29.4%; Pred. No. 85;
 Matches 5; Conservative 11; Mismatches 1; Indels 0; Gaps 0;
 QY 907 ATTTCTTTGGTCTTGG 923
 |:::|:::|:::|:::|
 DB 1 AUUUUUUUUUUUUUUG 17
 RESULT 168
 AAT16398/c
 ID AAT16398 standard; DNA; 18 BP.
 XX
 AC AAT16398;
 XX
 DT 13-SEP-1996 (first entry)
 XX
 DE Primer #1 for SWS2359 human obesity gene.
 XX
 KW Obesity; mouse; OBP; leptin; hormone; body weight regulation; diabetes;
 KW food intake; energy expenditure; high blood pressure; cholesterol; human;
 KW gene therapy; antibody; cancer; Kobe beef; Foie gras; immunoassay; PCR;
 KW primer; amplify; polymerase chain reaction; ss.
 XX
 OS Synthetic.
 XX
 PN GB2292382-A.
 XX
 PD 21-FEB-1996.
 XX
 PF 17-AUG-1995; 95GB-00016947.
 XX
 PR 17-AUG-1994; 94US-00292345.
 PR 30-NOV-1994; 94US-00347563.
 PR 10-MAY-1995; 95US-00438431.
 PR 07-JUN-1995; 95US-00483211.
 XX
 PA (UYRQ) UNIV ROCKEFELLER.
 XX
 PI Friedman JM, Zhang Y, Proenca R, Maffei M, Halaas JL, Gajiwala K;
 PI Burley SK;
 XX
 WI; 1996-099009/11.
 DR
 XX
 PT Obesity polypeptide(s) able to modulate body wt. - useful for e.g.
 PT reducing wt. in treatment of diabetes, high blood pressure and high
 PT cholesterol and for cosmetic reasons.
 XX
 PS Example 10; Page 141; 304pp; English.
 XX
 CC AAT16392-T16429 represent amplification primers for the human obesity
 CC polypeptide (OBP) gene sequence (see AAT16373). These sequences were used
 CC to amplify the OBP gene sequence from the YAC contig containing the human
 CC OBP gene, in a series of sequence tagged-site (STS)-specific PCR assays.
 CC There were 19 STSs found within the YAC contig human OBP gene sequence.
 CC This sequence was used in conjunction with AAT16399 to amplify the STS
 CC SWS2359. OBP has effects on both food intake and energy expenditure. OBP
 CC and its analogues are useful for modifying body weight (optionally
 CC combined with known medicaments), for treating diabetes, high blood
 CC pressure or high cholesterol. The OBP coding sequence (and sequences
 CC complementary to it) can be used in gene therapy for modifying body
 CC weight. The protein can be used for reducing weight for health or
 CC cosmetic reasons in obese humans, or to produce leaner food animals.
 CC Antagonists of OBP (including antibodies) are useful for increasing body
 CC weight, e.g. for treating weight loss associated with cancer, or for
 CC cosmetic reasons in humans, or for production of Kobe beef or Foie gras
 CC in domestic animals. OBP antibodies (Ab) can also be used in diagnostic
 CC immunoassays for the presence of OBP. The formation of Ab-OBP complexes
 CC enabled in vitro evaluation of levels of OBP in a sample, especially to
 CC detect diseases associated with elevated or decreased levels, and to
 CC monitor treatment of these diseases
 CC

```

XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
    Query Match      0.7%; Score 15.4; DB 1; Length 18;
    Best Local Similarity 94.1%; Pred. No. 1e+02;
    Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 730 CAGGAGAAACAGAACAC 746
    |||||
Db 18 CAGGAGAAACAGAACAC 2

RESULT 169
AAC62593/c
ID AAC62593 standard; DNA; 18 BP.
XX AC AAC62593;
XX AC
DT 01-FEB-2001 (first entry)
XX DE Human OB gene sequence tagged-site-specific PCR primer #7.
XX KW Human; mouse; OB gene; obesity; adiposity; body weight; PCR primer; ss.
XX OS Homo sapiens.
XX PN US6124448-A.
XX PD 26-SEP-2000.
XX PF 07-JUN-1995; 95US-00488208.
XX PR 17-AUG-1994; 94US-00292345.
XX PR 30-NOV-1994; 94US-00347563.
XX PR 10-MAY-1995; 95US-00438431.
XX PA (UYRQ ) UNIV ROCKEFELLER.
XX PI Maffei M, Proenca R, Zhang Y, Friedman JM;
XX DR WPI; 2000-601556/57.
XX PT Nucleic acid primers and probes useful for detecting mutations in
XX PT mammalian OB gene associated with regulation of body weight and
XX PT adiposity.
XX PS Example 10; Col 80; 153pp; English.
XX CC The present sequence is a PCR primer which was used in an invention
XX CC relating to the control of body weight of animals including humans.
XX CC Nucleic acids of at least 10 nucleotides which are hybridisable to a non-
XX CC coding region of an OB nucleic acid have been created. The OB gene plays
XX CC a critical role in the regulation of body weight and adiposity. The
XX CC nucleic acids may be used as probes or as primers for PCR. They are
XX CC useful for evaluating the presence of mutations in the human OB gene or
XX CC for evaluating the level of expression of OB mRNA. Defects associated
XX CC with OB gene expression result in obese phenotypes
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
    Query Match      0.7%; Score 15.4; DB 1; Length 18;
    Best Local Similarity 94.1%; Pred. No. 1e+02;
    Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 730 CAGGAGAAACAGAACAC 746
    |||||
Db 18 CAGGAGAAACAGAACAC 2

RESULT 170
AAAL2315/c
ID AAAL2315 standard; DNA; 18 BP.
XX XX

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AC AAAL2315;
XX XX
DT 18-AUG-2000 (first entry)
XX DE Human OB DNA PCR primer sWSS2359 #1.
XX KW OB gene; body weight; obesity; anorectic; adipose tissue; brain; human;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN US6048837-A.
XX PD 11-APR-2000.
XX PF 07-JUN-1995; 95US-00485942.
XX PR 17-AUG-1994; 94US-00292345.
XX PR 30-NOV-1994; 94US-00347563.
XX PR 10-MAY-1995; 95US-00438431.
XX PA (UYRQ ) UNIV ROCKEFELLER.
XX PI Proenca R, Zhang Y, Friedman JM;
XX DR WPI; 2000-302788/26.
XX PT Modifying body weight of an animal comprises administering mammalian
XX PT obesity polypeptide obtained from humans and murine.
XX PS Example 10; Col 133-134; 153pp; English.
XX CC This invention describes a novel method for modifying body weight of an
XX CC animal which comprises administering mammalian obesity (OB) polypeptide.
XX CC The products of the invention have anorectic activity. The OB polypeptide
XX CC at a dose of 5 mg/g/day in 300 micro litres of PBS was injected
XX CC intraperitoneally into mice. Control mice were injected with PBS
XX CC dialysate of the recombinant protein. The body weight of the mice was
XX CC noted. The results shows that recombinant the OB polypeptide is capable
XX CC of reducing a body weight and is found to be effective when it is
XX CC administered daily. The OB polypeptide acts as a part of the signalling
XX CC pathway by which adipose tissue communicates with the brain and other
XX CC organs. (1) is useful for modulating body weight of an animal especially
XX CC humans. This sequence represents a PCR primer used in the amplification
XX CC of a human OB protein described in the method of the invention
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
    Query Match      0.7%; Score 15.4; DB 1; Length 18;
    Best Local Similarity 94.1%; Pred. No. 1e+02;
    Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 730 CAGGAGAAACAGAACAC 746
    |||||
Db 18 CAGGAGAAACAGAACAC 2

RESULT 171
AAC62673/c
ID AAC62673 standard; DNA; 18 BP.
XX AC AAC62673;
XX XX
DT 01-FEB-2001 (first entry)
XX DE Human OB gene sequence tagged-site-specific PCR primer #7.
XX KW Human; mouse; anabolic; cytostatic; immunostimulant;
XX KW OB polypeptide inhibitor; body weight; obesity; OB gene; cancer; AIDS;
XX KW anorexia nervosa; hypertension; heart disease; Type II diabetes;
XX KW PCR primer; ss.
XX OS Homo sapiens.

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XX FN US6124439-A.
XX PD 26-SEP-2000.
XX PF 07-JUN-1995; 95US-00488214.
XX PR 17-AUG-1994; 94US-00292345.
XX PR 30-NOV-1994; 94US-00347563.
XX PR 10-MAY-1995; 95US-00438431.
XX PA (UVRQ ) UNIV ROCKEFELLER.
XX PS
XX PI Proenca R, Zhang Y, Friedman JM;
XX DR WPI; 2000-611018/58.
XX CC Novel antibody to mammalian obesity polypeptide useful for diagnosis and
XX CC treatment of weight loss associated with disorders such as cancer, AIDS
XX CC and anorexia nervosa.
XX PS Example 10; Col 80; 150pp; English.
XX CC The present sequence is a PCR primer which was used in an invention
XX CC relating to the control of body weight of animals including humans.
XX CC Antibodies against the mammalian obesity (OB) polypeptide have been
XX CC identified. The antibodies are useful for modulating the activity of OB
XX CC to control body weight and fat content and/or to treat certain
XX CC pathological conditions in which there is abnormal depression or
XX CC elevation of body weight. The antibodies are used to treat weight loss
XX CC associated with cancer, AIDS and anorexia nervosa. They are useful for
XX CC the diagnosis of nutritional disorders such as obesity and diseases
XX CC associated with obesity, such as hypertension, heart disease and Type II
XX CC diabetes. The kits are used to determine the presence or amount of OB in
XX CC the blood or plasma of an individual
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 730 CAGGAGAAACAGAACAC 746
Db 18 CAGGAGAAACAGAACAC 2
|||||
RESULT 172
ABX89547/c
ID ABX89547 standard; DNA; 18 BP.
XX AC ABX89547;
XX DT 08-MAY-2003 (first entry)
XX DE Human sequence tagged specific PCR primer sWss2359 #1.
XX KW ss; human; obese polypeptide; body weight; PCR; ob polypeptide; leptin;
XX KW adipocyte; appetite reduction; cosmetic; primer; fat deposit reduction;
XX KW improved body appearance; heart disease; obesity; agriculture;
XX KW nutritional disorder; cancer associated weight loss; type II diabetes;
XX KW obesity associated disease; AIDS associated weight loss; hypertension;
XX KW gene therapy.
XX OS Homo sapiens.
XX PN US2002107211-A1.
XX PD 08-AUG-2002.
XX PR 13-DEC-2000; 2000US-00736084.
XX PF 07-JUN-1995; 95US-00485943.
XX PR

XX PA (UVRQ ) UNIV ROCKEFELLER.
XX PI Friedman JM, Halaas JL, Gajiwala K, Burley SK, Zhang Y;
XX PI Proenca R, Maffei M;
XX DR WPI; 2002-722695/78.
XX CC New obese polypeptide useful for inducing reduction of body weight in an
XX CC animal, for preparing a composition for treating obesity, disease
XX CC associated with obesity such as hypertension, heart disease or type II
XX CC diabetes.
XX PS Example 10; Page 44; 144pp; English.
XX CC The invention relates to an obese (ob) polypeptide, also known as leptin,
XX CC expressed predominantly by adipocytes and capable of inducing reduction
XX CC of body weight in an animal. The polypeptide is useful for monitoring
XX CC therapeutic treatment of a disease associated with elevated or decreased
XX CC levels of ob polypeptide in a mammalian subject; for use in
XX CC radioimmunoassays for measuring fat and/or plasma levels of ob protein or
XX CC for detecting the presence and level of receptor for ob on tissues, such
XX CC as hypothalamus; for screening expression libraries to isolate active
XX CC receptors; for use in cosmetics by improving body appearance by reducing
XX CC fat deposits or appetite or both and is used independently or in
XX CC conjunction with other cosmetic strategies e.g. surgery for its cosmetic
XX CC effect; for identifying agonists or antagonists that affect its activity
XX CC and has potential agricultural uses e.g. increasing the body weight of
XX CC animals. Nucleic acid encoding the polypeptide is useful for identifying
XX CC mutation in ob nucleotide, in gene therapy for obesity and in the
XX CC measurement of its encoded RNA and protein in nutritional disorders. A
XX CC host cell transfected with a vector expressing the polypeptide is useful
XX CC in the preparation of modulators of the polypeptide and its nucleic acid.
XX CC An immunogenic fragment of the polypeptide is useful for preparing an
XX CC antibody. The antibody is useful for measuring the presence of the
XX CC polypeptide in a sample; for evaluating the level of ob polypeptide in a
XX CC biological sample to detect or diagnose the presence of a disease
XX CC associated with elevated or decreased levels of ob polypeptide in a
XX CC mammalian subject; for imaging ob polypeptide in situ. A composition
XX CC comprising the polypeptide is useful for reducing body weight of an
XX CC animal, in particular humans. A composition comprising an antagonist of
XX CC the polypeptide is useful for increasing body weight of an animal.
XX CC Compositions containing the polypeptide and the antagonist are useful for
XX CC treating obesity, weight loss associated with cancer or AIDS, disease
XX CC associated with obesity such as hypertension, heart disease or type II
XX CC diabetes. The present sequence represents a human sequence tagged
XX CC specific PCR primer
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 730 CAGGAGAAACAGAACAC 746
Db 18 CAGGAGAAACAGAACAC 2
|||||
RESULT 173
ABL61421/c
ID ABL61421 standard; DNA; 18 BP.
XX AC ABL61421;
XX DT 16-OCT-2002 (first entry)
XX DE Human Ob gene STS sWSS2359 AFMA065zg9 PCR primer #1.
XX KW Ob; human; obese; adiposity; body weight; anorectic; anabolic; PCR;
XX KW primer; chromosome 7; STS; sequence tagged site; 7q31.3;
XX KW microsatellite marker; ss.

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OS Homo sapiens.
 XX US6350730-B1.
 XX 26-FEB-2002.
 XX 07-JUN-1995; 95US-00488223.
 XX 17-AUG-1994; 94US-00292345.
 PR 30-NOV-1994; 94US-00347563.
 PR 10-MAY-1995; 95US-00438431.
 XX (UYRQ) UNIV ROCKEFELLER.
 XX Friedman JM, Zhang Y, Proenca R;
 XX WPI; 2002-412914/44.
 XX Modifying the body weight of an animal comprises administering an obese
 PT gene (OB) polypeptide analog.
 XX Example 10; Col 79-80; 152pp; English.
 XX This invention describes a novel method of modifying the body weight of
 CC an animal comprising administering an obese gene (OB) polypeptide
 CC analogue, capable of modulating body weight and adiposity. The invention
 CC has anorectic and anabolic activity. ABL61415-ABL61468 represent PCR
 CC primers used in the detection of sequence tagged sites (STS's) and
 CC microsatellite markers used in the mapping of the human Ob gene onto
 CC chromosome 7. These genetic markers represent an important tool for
 CC studying the possible role of the Ob gene in inherited forms of human
 CC obesity
 XX Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 730 CAGGAGAAACAGAACAC 746
 Db |||||
 18 CAGGAGAAACAGAACAC 2
 RESULT 174
 ABX96407/c
 ID ABX96407 standard; DNA; 18 BP.
 XX AC ABX96407;
 XX DT 13-MAY-2003 (first entry)
 XX DE Human obese (ob) gene associated PCR primer #7.
 XX OB polypeptide; obese polypeptide; leptin; body weight; obesity;
 KW weight gain; protein therapy; weight loss; cancer; AIDS; human;
 KW acquired immunodeficiency syndrome; anorexia nervosa; PCR; primer; ss.
 XX Homo sapiens.
 XX US6471956-B1.
 XX 29-OCT-2002.
 XX 07-JUN-1995; 95US-00488225.
 XX 17-AUG-1994; 94US-00292345.
 PR 30-NOV-1994; 94US-00347563.
 PR 10-MAY-1995; 95US-00438431.
 XX (UYRQ) UNIV ROCKEFELLER.
 XX Friedman JM, Zhang Y, Proenca R;

XX WPI; 2003-298093/29.
 XX New human or mouse OB polypeptide, also referred to as leptin
 PT polypeptide, which is capable of modulating body weight, useful for
 PT treating obesity.
 XX Example 10; Col 79-80; 153pp; English.
 XX The invention describes an OB (obese) polypeptide (also referred as
 CC leptin) (I), capable of modulating body weight, comprising amino acids 22
 CC - 167 of a human or mouse OB polypeptide sequence of 167 amino acids
 CC (S1), given in the specification, or amino acids 22 - 166 a human or
 CC mouse OB polypeptide sequence of 166 amino acids (S2), given in the
 CC specifications. The OB polypeptide is useful for reducing body weight in
 CC conditions of obesity, and as a target for neutralising antibodies which
 CC results in weight gain (protein therapy), for treating weight loss
 CC associated with cancer, acquired immunodeficiency syndrome (AIDS) or
 CC anorexia nervosa. This sequence represents a primer associated with the
 CC isolation of the human obese (ob) or leptin gene
 XX Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 730 CAGGAGAAACAGAACAC 746
 Db |||||
 18 CAGGAGAAACAGAACAC 2
 RESULT 175
 AAA85678/c
 ID AAA85678 standard; DNA; 19 BP.
 XX AC AAA85678;
 XX DT 04-DEC-2000 (first entry)
 XX DE Cyclin B1 ribozyme binding site #7.
 XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
 XX Mammalia.
 XX WO200032765-A2.
 XX 08-JUN-2000.
 XX 06-DEC-1999; 99WO-US028772.
 XX 04-DEC-1998; 98US-0110954P.
 XX (IMMU-) IMMUSOL INC.
 XX Tritz R, Welch PJ, Barber JR, Robbins JM;
 XX WPI; 2000-412314/35.
 XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
 PT PCNA and Cyclin B1.
 XX Disclosure; Page 96; 109pp; English.
 XX The present invention relates to a hairpin or hammerhead ribozyme,
 CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
 CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
 CC Representative examples of ribozyme recognition sites are given in
 CC AA82415 to AAA86787. The ribozyme of the invention is useful for
 CC inhibiting restenosis by introduction of the ribozyme into cells. The
 CC ribozyme is resistant to endonuclease activity and hence is efficient in

```

CC restenosis treatment
XX Sequence 19 BP; 0 A; 7 C; 4 G; 8 T; 0 U; 0 Other;
SQ
  Query Match      0.7%; Score 15.4; DB 1; Length 19;
  Best Local Similarity 94.1%; Pred. No. 1.2e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 732 GGAGAAACAGAACACCG 748
Db 19 GGAGAGCAGAACACCG 3

RESULT 176
AAH60840/c
ID AAH60840 standard; DNA; 19 BP.
XX
AC AAH60840;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cyclin B1 ribozyme binding site SEQ ID NO:3264.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW anisickling; ophthalmological; keratolytic; antidiabetic; virucide;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; squamous cell carcinoma;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 309; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antiproliferative,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, anisickling,
XX ophthalmological, vulnary, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing

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CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 0 A; 7 C; 4 G; 8 T; 0 U; 0 Other;
  Query Match      0.7%; Score 15.4; DB 1; Length 19;
  Best Local Similarity 94.1%; Pred. No. 1.2e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 732 GGAGAAACAGAACACCG 748
Db 19 GGAGAGCAGAACACCG 3

RESULT 177
AAQ73379/c
ID AAQ73379 standard; DNA; 20 BP.
XX
AC AAQ73379;
XX
DT 25-MAR-2003 (revised)
DT 02-MAY-1995 (first entry)
XX
DE Anti-HSV-1 G4 oligo #5652.
XX
KW Hybridise; herpes simplex virus; HSV; open reading frame;
KW translation initiation site; coding region; 5' UTR; ss.
XX
OS Synthetic.
XX
XX WO9419945-A1.
XX
XX 15-SEP-1994.
XX
XX 07-MAR-1994; 94WO-US002471.
XX
XX 12-MAR-1993; 93US-00031147.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Draper KG, Crooke ST, Mirabelli CK, Ecker DJ, Hanecak R;
XX Anderson KP, Brown-Driver VL, Wyatt JR;
XX WPI; 1994-302552/37.
XX
XX New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene -
XX are used in the treatment and diagnosis of herpes simplex virus,
XX cytomegalovirus, Epstein Barr virus and varicella zoster infections.
XX
XX Claim 12; Page 36; 72pp; English.
XX
XX The sequences given in AAQ73325-81 represent oligonucleotides which
XX hybridise specifically with DNA or RNA from a herpes virus gene
XX corresponding to one of the open reading frames UL5, -8, -9, -20, -27-
XX 29, -30, -42, -52 or IB175 of herpes simplex virus type 1 (HSV-1). These
XX oligos pref. hybridise with a translation initiation site, a coding
XX region or a 5' untranslated region. These oligos may be used in
XX compositions for the treatment and diagnosis of herpes viral infection,
XX by contacting the virus or the animal, or its cells, tissues or body
XX fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
  Query Match      0.7%; Score 15.4; DB 1; Length 20;
  Best Local Similarity 94.1%; Pred. No. 1.5e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1250 ACCCCATCCCCAACCCC 1266
Db 19 ACCCCATCCCCAACCCC 3

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RESULT 178
AAQ61999/c
ID AAQ61999 standard; DNA; 20 BP.
XX
AC AAQ61999;
XX
XX 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
DE Guanine quartet containing oligomer, #10.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..20
FT /*tag= a
FT /*note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Disclosure; Page 107; 144pp; English.
XX
XX The sequences given in AAQ61990-2001 are oligonucleotides which contain
XX G4 or G3 stretches and which may be used for inhibiting replication of
XX herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
XX influenza virus, or for treating inflammatory and neurological disorders
XX caused by phospholipase A2 activity in cases of hyper- proliferation,
XX malignancy, cardiovascular disease and snake bite. Oligonucleotides such
XX as these, may be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.5e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1250 ACCCCATCCCAACCCC 1266
XX ||||| |||||
XX Db 19 ACCCCAAACCCCAACCCC 3
XX
XX RESULT 179
AAQ61896/c
ID AAQ61896 standard; DNA; 20 BP.
XX
XX AAQ61896;
XX
XX 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..20
FT /*tag= a
FT /*note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Disclosure; Page 107; 144pp; English.
XX
XX The sequences given in AAQ61990-2001 are oligonucleotides which contain
XX G4 or G3 stretches and which may be used for inhibiting replication of
XX herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
XX influenza virus, or for treating inflammatory and neurological disorders
XX caused by phospholipase A2 activity in cases of hyper- proliferation,
XX malignancy, cardiovascular disease and snake bite. Oligonucleotides such
XX as these, may be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.5e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1250 ACCCCATCCCAACCCC 1266
XX ||||| |||||
XX Db 19 ACCCCAAACCCCAACCCC 3
XX
XX RESULT 180
AAQ61995/c
ID AAQ61995 standard; DNA; 20 BP.
XX
XX AAQ61995;
XX
XX 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
XX
XX Guanine quartet containing oligomer, #6.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
XX
XX
XX HSV replication inhibiting oligomer, ISIS no 5652.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV;
KW human cytomegalovirus; influenza virus; inflammation;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy;
KW telomere length; retard; aging; ss.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..20
FT /*tag= a
FT /*note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Claim 5; Page 19; 144pp; English.
XX
XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and
XX neurological disorders caused by phospholipase A2 activity in cases of
XX hyperproliferation, malignancy, cardiovascular disease and snake bite.
XX They may also be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.5e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1250 ACCCCATCCCAACCCC 1266
XX ||||| |||||
XX Db 19 ACCCCAAACCCCAACCCC 3
XX
XX RESULT 180
AAQ61995/c
ID AAQ61995 standard; DNA; 20 BP.
XX
XX AAQ61995;
XX
XX 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
XX
XX Guanine quartet containing oligomer, #6.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;

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KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX Synthetic.
XX
OS
XX
XX Key Location/Qualifiers
XX misc_feature 1..20
XX /tag= a
XX /note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Disclosure; Page 106; 144pp; English.
XX
XX The sequences given in AAQ61990-2001 are oligonucleotides which contain
XX G4 or G3 stretches and which may be used for inhibiting replication of
XX herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
XX influenza virus, or for treating inflammatory and neurological disorders
XX caused by phospholipase A2 activity in cases of hyper-proliferation,
XX malignancy, cardiovascular disease and snake bite. Oligonucleotides such
XX as these, may be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.5e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1250 ACCCCATCCCAACCCC 1266
XX ||||| ||||| ||||| |||||
XX 19 ACCCCACCCCAACCCC 3
XX
XX RESULT 181
XX AAQ61904/c
XX ID AAQ61904 standard; DNA; 20 BP.
XX
XX AC AAQ61904;
XX
XX 25-MAR-2003 (revised)
XX 04-NOV-1994 (first entry)
XX
XX HSV replication inhibiting oligomer, ISIS no 5650.
XX
XX Inhibition; replication; herpes simplex virus; HIV;
XX human cytomegalovirus; influenza virus; inflammation;
XX neurological disorders; phospholipase A2 activity; hyperproliferation;
XX malignancy; cardiovascular disease; snake bite; malignancy;
XX telomere length; retard; aging; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1..20
XX /tag= a
XX
XX WO9504068-A1.
XX
XX PN

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FT XX /note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Disclosure; Page 19; 144pp; English.
XX
XX The sequences given in AAQ61825-50 and AAQ61885-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and
XX neurological disorders caused by phospholipase A2 activity in cases of
XX hyperproliferation, malignancy, cardiovascular disease and snake bite.
XX They may also be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.5e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1250 ACCCCATCCCAACCCC 1266
XX ||||| ||||| ||||| |||||
XX 19 ACCCCACCCCAACCCC 3
XX
XX RESULT 182
XX AAQ97982/c
XX ID AAQ97982 standard; DNA; 20 BP.
XX
XX AC AAQ97982;
XX
XX 25-MAR-2003 (revised)
XX 19-OCT-1995 (first entry)
XX
XX Peptide nucleic acid oligomer targeting HIV gene.
XX
XX Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
XX antiviral; antisense; triple helix; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1..20
XX /tag= a
XX
XX /note= "at least one (and preferably all) of the backbone
XX subunits are composed of N-acetyl N-(2-aminoethyl)glycine
XX peptide residues, the nucleobase being attached
XX covalently to the acetyl group and the peptide linkage
XX being formed by condensation of the glycine carboxy group
XX of one residue with the amino group of the 2-aminoethyl
XX moiety in the next residue"
XX
XX WO9504068-A1.
XX
XX PN

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XX PD 09-FEB-1995.
XX XX
XX PF 28-JUL-1994; 94WO-US0008517.
XX XX
XX PR 29-JUL-1993; 93US-00099718.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX PI Becker DJ;
XX DR WPI; 1995-082179/11.
XX XX
XX PT Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid
XX PT sub:unit - binds in complementary manner to DNA and RNA, and useful for
XX PT modulating HIV viral activity, e.g. in treating AIDS.
XX XX
XX PS Claim 2; Page 176; 186pp; English.
XX XX
XX CC New peptide nucleic acid (PNA) oligomers are provided which (a) consist
XX CC of naturally occurring nucleobases covalently bound to a polyamide
XX CC backbone and (b) hybridise to the translation initiation AUG region, 5'
XX CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice
XX CC junctions or coding sequence of a human immunodeficiency virus gene
XX CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target
XX CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene
XX CC regulation moieties. They have utility as gene-targeted drugs for
XX CC modulating HIV processes. Hence they can be used to treat AIDS and other
XX CC viral infections. They are also useful in diagnostic applications and as
XX CC research tools. PNA oligomers have high affinity for complementary single
XX CC stranded DNA. They are also able to form triple helices in which a first
XX CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the
XX CC resulting double helix or with the first PNA strand. The PNAs possess no
XX CC significant charge and are water soluble, which facilitates cellular
XX CC uptake. Further, since they contain amides of non-biological amino acids,
XX CC they are biostable and resistant to enzymatic degradation by proteases.
XX CC The present sequence is a specifically claimed PNA sequence (represented
XX CC by the sequence of nucleobases) targeting HIV genes. (Updated on 25-MAR-
XX CC 2003 to correct PN field.)
XX SQ Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1250 ACCCATCCCCAACCCC 1266
DB 19 ACCCAACCCCAACCCC 3

RESULT 183
AAAF56086/c
ID AAF56086 standard; DNA; 20 BP.
XX
XX AC AAF56086;
XX DT 18-APR-2001 (first entry)
XX DE HBV DNA polymerase gene PCR primer HBPr135B.
XX KW HBV; hepatitis B virus; DNA polymerase gene; anti-HBV drug resistance;
XX KW mutation detection; PCR primer; ss.
XX OS Hepatitis B virus.
XX PN WO200104358-A2.
XX XX
XX PD 18-JAN-2001.
XX PF 05-JUL-2000; 2000WO-EP006306.
XX XX
XX PR 08-JUL-1999; 99EP-00870148.

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PR 13-JUL-1999; 99US-0143546P.
XX XX
XX PA (INNO-) INNOGENETICS NV.
XX XX
XX PI Stuyver L, Maertens G, Van Geyt C;
XX XX
XX DR WPI; 2001-138370/14.
XX XX
XX PT Monitoring anti-HBV drug resistance by genetic detection of mutations in
XX PT DNA polymerase of HBV in patient's sample, involves hybridizing the
XX PT polynucleic acids of the sample with a probe and detecting the hybrid.
XX XX
XX PS Claim 4; Page 12; 64pp; English.
XX XX
XX CC The present sequence is a primer used in a method for monitoring anti-
XX CC hepatitis B virus (HBV) drug resistance in a patient by genetic detection
XX CC of any one of mutations L528M, M552V/I and/or V/L/M555I in HBV DNA
XX CC polymerase in a biological sample from the patient. The method is useful
XX CC in the field of genetic detection of anti-HBV drug resistance during HBV
XX CC therapy. The method is rapid, reliable and precise
XX SQ Sequence 20 BP; 12 A; 2 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTTGGTCTTTG 923
DB 17 ATTTCTTTTGGTCTTTG 1

RESULT 184
ABQ92981
ID ABQ92981 standard; DNA; 20 BP.
XX
XX AC ABQ92981;
XX DT 29-AUG-2003 (revised)
XX DT 21-OCT-2002 (first entry)
XX DE T. tauschii/wheat D genome microsatellite cfd64 left PCR primer.
XX KW Microsatellite marker; wheat; D genome; mapping; genotyping;
XX KW polymorphism; phenotypic trait; QTL; quantitative trait locus;
XX KW disease-associated gene; development factor; quality factor;
XX KW resistance factor; wheat product; identification; detection;
XX KW genetically modified wheat; PCR; primer; ss.
XX OS Aegilops tauschii.
XX OS Triticum aestivum.
XX PN EP1217079-A1.
XX PD 26-JUN-2002.
XX PF 22-DEC-2000; 2000EP-00403659.
XX PR 22-DEC-2000; 2000EP-00403659.
XX PA (INRG) INRA INST NAT RECH AGRONOMIQUE.
XX PI Bernard M, Sourdille P, Guyomarch H;
XX XX
XX DR WPI; 2002-550410/59.
XX XX
XX PT Map of wheat D genome comprising the genome location of a microsatellite
XX PT marker, useful for e.g. identifying genes responsible for a desired
XX PT phenotypic trait, especially quantitative trait loci in wheat, and
XX PT diseases.
XX XX
XX PR Claim 4; Page 6; 105pp; English.

```


CC The invention relates to a map of the bread wheat D genome comprising the
 CC genome location of a microsatellite marker selected from a group of 185
 CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use
 CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to
 CC amplify and detect the microsatellite markers, and to identify genes
 CC responsible for a phenotypic trait of interest in wheat. Wheat is an
 CC allohexaploid species consisting of 3 diploid genomes designated A, B and
 CC D, resulting from two successive intercrossings involving at least three
 CC different species. The D genome is thought to have been introduced in the
 CC most recent intercrossing, between the amphiploid AABB and triticum
 CC tauschii (DD), probably involving only a limited number of genotypes of
 CC both species. Due to its polyploid genome, the large size of its genome,
 CC and its low level of polymorphism, the genetic mapping of wheat has to
 CC date been difficult. Microsatellites are tandemly repeated sequences
 CC between one and six nucleotides long, and are very polymorphic in length,
 CC mainly due to polymerase slippage during replication. This high degree of
 CC polymorphism makes them especially suitable for the genetic mapping of
 CC species which show little intraspecies polymorphism, such as wheat. In
 CC addition, microsatellites are codominant, and exhibit Mendelian
 CC inheritance. The 185 microsatellite markers of the invention are
 CC developed from the ancestral diploid donor species Triticum tauschii and
 CC map to the wheat D genome, which is less polymorphic than the A or B
 CC genomes. These microsatellite markers thus help to overcome some of the
 CC problems associated with the genetic mapping of wheat. The wheat D genome
 CC map and the microsatellite markers and associated primers of the
 CC invention are useful for identifying genes responsible for a phenotypic
 CC trait of interest, most notably QTLs (quantitative trait loci). In
 CC particular they may be used for analysing genes and alleles implicated in
 CC disease and for identifying development factors, quality factors and
 CC factors conferring resistance to pathogens and xenobiotics. The
 CC microsatellite markers, and associated primers may be also be used in
 CC mapping and genotyping diploid and polyploid species of Triticum,
 CC particularly Aegilops, Triticum monococcum, Triticum durum, Triticum
 CC aestivum, or related species; for identifying cultivars and hybrids of
 CC Triticum and related species; to assess whether or not a product
 CC comprises wheat or a related species; and to assess whether or not a
 CC product comprises genetically modified wheat. The present sequence
 CC represents a specifically claimed Triticum tauschii/wheat genome D
 CC microsatellite marker left PCR primer of the invention. (Updated on 29-
 CC AUG-2003 to standardise OS field)

XX Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
 XX Query Match 0.7%; Score 15.4; DB 1; Length 20;
 XX Best Local Similarity 94.1%; Pred. No. 1.5e+02;
 XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 386 ACAGTGTGTGGCCCT 902
 ||||| ||||| ||||| |||||
 Db 1 ACAGTGTGTGGCCCT 17

RESULT 185
 AAZ56188
 ID AAZ56188 standard; DNA; 20 BP.
 AC AAZ56188;

DT 28-MAR-2000 (first entry)

XX Antisense oligonucleotide A1.3 for IL-13 alpha' receptor inhibition.
 DE Interleukin-13; IL-13; antisense oligonucleotide; asthma; allergy;
 KW receptor expression inhibitor; immunoglobulin E; IgE; inflammation;
 KW hyperosinophilia; alpha' chain; ss.

XX Homo sapiens.
 OS WO9966037-A2.
 XX FN

XX 23-DEC-1999.

XX 17-JUN-1999; 99WO-CA000572.

XX 17-JUN-1998; 98CA-02235420.
 XX (REEX-) RECH EXPERTISES & DEV MEDICAUX PARENZ IN.
 PA Renzi P;
 PI
 XX WPI; 2000-097743/08.

XX Antisense oligonucleotides directed to CCR3, interleukin or granulocyte
 PT macrophage colony stimulating factor receptors, used for treating or
 PT preventing asthma, allergies, hyperosinophilia, inflammation or cancer.

XX Claim 5; Page 18; 72pp; English.

XX This is an antisense oligonucleotide directed against the interleukin-13
 CC (IL-13) receptor alpha' chain, for inhibiting receptor expression. IL-13
 CC is involved in immunoglobulin E (IgE) production, the development and
 CC persistence of asthma and atopy. The invention relates to antisense
 CC oligonucleotides directed against a nucleic acid sequence encoding either
 CC a chemokine receptor (CCR3), a common subunit of interleukin-4 (IL-4) and
 CC interleukin-13 (IL-13) receptors, or a common subunit of interleukin-3
 CC (IL-3), interleukin-5 (IL-5) and granulocyte macrophage colony
 CC stimulating factor (GM-CSF) receptors. The antisense oligonucleotides can
 CC be used in the treatment or prevention of asthma, allergy,
 CC hyperosinophilia, general inflammation or cancer

XX Sequence 20 BP; 4 A; 11 C; 5 G; 0 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 15.2; DB 1; Length 20;
 XX Best Local Similarity 85.0%; Pred. No. 1.6e+02;
 XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1287 CGCCCAAGCCACAGAGCC 1306
 ||||| ||||| ||||| |||||
 Db 1 CGCCCAAGCCCGCAGAGCC 20

RESULT 186
 ABS55159

ID ABS55159 standard; DNA; 20 BP.

AC ABS55159;

DT 10-DEC-2002 (first entry)

XX Cow calpastatin (CAST) D/E allele probe LOX K6.

XX Meat tenderness; animal; calpastatin; lysyl oxidase; breeding animal;
 KW unpedigreed animal; feed lot entry; genetic marker; calpain; probe; ss;
 KW post-mortem proteolysis; collagen fibrillogenesis; cow; CAST; D/E allele.
 XX Bos sp.
 OS WO200264820-A1.
 XX FN
 XX 22-AUG-2002.
 XX 08-FEB-2002; 2002WO-AU000122.
 XX 09-FEB-2001; 2001AU-00002975.
 XX (CSIR) COMMONWEALTH SCI & IND RES ORG.
 PA (QUEE-) STATE QUEENSLAND DEPT PRIMARY IND.
 PA (TYNE-) UNIV NEW ENGLAND.
 PA (NEWS-) NEW SOUTH WALES DEPT AGRIC.
 PA (MEAT-) MEAT & LIVESTOCK AUSTRALIA LTD.
 XX Barendse WJ;
 XX WPI; 2002-723174/78.
 XX Assessing meat tenderness useful for selecting breeding animals and

PT unpedigreed animals for entry into feed lots comprises testing the animal
 PT for the presence or absence of genetic markers associated with
 PT calpastatin or lysyl oxidase.

XX Claim 33; Page 70; 8pp; English.

XX The present invention relates to a new method for assessing the
 CC tenderness of meat from an animal. The method involves testing the
 CC for the presence or absence of a genetic marker, which is an allele of
 CC the gene encoding calpastatin or lysyl oxidase, respectively. The method
 CC is useful for selecting breeding animals and unpedigreed animals for
 CC entry into feed lots. The meat obtained from the selected animal is
 CC useful for breeding. The genetic markers are useful for assessing meat
 CC tenderness. The genetic markers are associated with calpastatin or lysyl
 CC oxidase. Calpastatin inhibits calpain activity and is assumed have a role
 CC in meat tenderness through the regulation of post-mortem proteolysis.
 CC Lysyl oxidase initiates cross-link formation at an early stage in
 CC collagen fibrillogenesis. The present nucleic acid sequence represents a
 CC cow calpastatin (CAST) D/E allele probe of the invention
 XX

SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 875 ACTCAGGCACCAAGTCTG 894
 |||||
 Db 1 ACTCAGGCACCAATAGCTG 20

RESULT 187

ID ABX12684 standard; DNA; 20 BP.

AC ABX12684;

DT 10-MAY-2003 (first entry)

DE Human IL-4/IL-13 receptor DNA, antisense oligonucleotide #4.

XX Human; inflammation; 2',6'-diaminopurine; DAP; antisense therapy;
 KW DAP-modified oligonucleotide; pulmonary disease; respiratory disease;
 KW neurological disease; cardiovascular disease; rheumatological disease;
 KW digestive disease; cutaneous disease; ophthalmological disease;
 KW urinary system disease; pathogen infection; genetic disease; cancer;
 KW airway; nose; pulmonary fibrosis; adult respiratory distress syndrome;
 KW cystic fibrosis; chronic obstructive lung disease; chronic bronchitis;
 KW eosinophilic bronchitis; asthma; allergy; allergic rhinitis; sinusitis;
 KW hyperesinophilia; cardiant; ophthalmological; cytostatic; antiasthmatic;
 KW antiallergic; antiinflammatory; immunosuppressive; atopic disease;
 KW neoplastic cell proliferation; antisense; IL-4; IL-13;
 KW interleukin-4 receptor; interleukin-13 receptor; ss.

OS Homo sapiens.

PN WO2003004511-A2.

PD 16-JAN-2003.

PF 08-JUL-2002; 2002WO-CA001046.

PR 06-JUL-2001; 2001US-0303071P.

PA (TOPI-) TOPIGEN PHARM INC.

PI Renzi P, Allam M, Allakhverdi Z;

DR WPI; 2003-247944/24.

XX Increasing in vivo efficacy of a nucleic acid molecule that is
 PT administered to a mammal for inhibiting inflammation in mammals, involves
 PT incorporating into the nucleic acid molecule at least one nucleotide

PT substitute.

XX Claim 28; Page 11; 63pp; English.

XX The present invention relates to a method for increasing the in vivo
 CC efficacy of oligonucleotides and inhibiting inflammation. The
 CC oligonucleotides comprise at least one nucleotide substitute of 2',6'-
 CC diaminopurine (DAP) and/or its analogue. The DAP nucleotide substitutions
 CC are useful for increasing in vivo efficacy of a nucleic acid molecule
 CC that is administered to a mammal. The DAP-modified oligonucleotides are
 CC useful in antisense therapy for treating and/or preventing
 CC pulmonary/respiratory diseases, neurological diseases, cardiovascular
 CC diseases, rheumatological diseases, digestive diseases, cutaneous
 CC infections, ophthalmological diseases, urinary system diseases, pathogen
 CC respiratory system disease is a sickness associated with an inflammation
 CC of the lungs, the airways and/or the nose. The respiratory system disease
 CC is selected from pulmonary fibrosis, adult respiratory distress syndrome,
 CC cystic fibrosis, chronic obstructive lung disease, chronic bronchitis,
 CC eosinophilic bronchitis, asthma, allergy, allergic rhinitis, sinusitis
 CC and hyperesinophilia. The DAP-modified oligonucleotides are more stable
 CC in the body, more effective, and less toxic than standard antisense
 CC oligonucleotides. DAP or its analogues are more effective than other
 CC substitutes of adenosine. ABX12681-ABX12698 represent antisense
 CC oligonucleotides for treating or preventing atopic diseases and
 CC neoplastic cell proliferation

SQ Sequence 20 BP; 4 A; 11 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1287 CGCCCAAGCCACAGACC 1306

|||
 Db 1 CGCCCAAGCCCGCAGACC 20

RESULT 188

ADB97971/c

ID ADB97971 standard; DNA; 20 BP.

AC ADB97971;

DT 04-DEC-2003 (first entry)

DE Human K-Ras codon 12 probe SEQ ID NO:55.

XX Kinetic detection; nucleic acid; hybridisation; high speed detection;
 KW human; K-Ras; probe; ss.

OS Homo sapiens.

PN WO2003062418-A1.

PD 31-JUL-2003.

PF 24-JAN-2003; 2003WO-JP000668.

PR 25-JAN-2002; 2002JP-00017272.

PR 27-AUG-2002; 2002JP-00247023.

PA (OLYU) OLYMPUS OPTICAL CO LTD.

PI Koike H, Nagaoka T, Satoh T, Kaneko Y, Hatanaka M, Fukuoka M;
 PI Sakamoto H, Yonekawa H;

DR WPI; 2003-608193/57.

XX Detecting nucleic acid data for rapid analysis.

XX Example 4; Page 57; 67pp; Japanese.

CC The invention relates to a method for kinetically detecting nucleic acid
 CC data. The method comprises allowing a target nucleic acid and a probe to
 CC bind and form a hybrid, and then detecting for it by kinetic collection
 CC of the signal data. The invention also encompasses a device for detecting
 CC nucleic acid data. The method of the invention provides for the high
 CC speed detection of nucleic acid data, and is capable of detecting a
 CC single base difference between nucleic acid sequences. The present
 CC sequence represents a human K-Ras codon 12 probe used in an example of
 CC the invention.

SQ Sequence 20 BP; 2 A; 2 C; 12 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 1.6e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1130 CCTTCACCTCCAGCTCCACC 1149
 |||||
 Db 20 CCTACGCCACCAGCTCCACC 1

RESULT 189
 AAZ74370/C
 ID AAZ74370 standard; DNA; 21 BP.

XX AC AAZ74370;

XX DT 10-SEP-2001 (first entry)

XX DE Human biallelic marker downstream amplification primer SEQ ID NO:8726.

XX Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.

XX OS Homo sapiens.

XX FN WO9954500-A2.

XX PD 28-OCT-1999.

XX PF 21-APR-1999; 99WO-IB000822.

XX PR 21-APR-1998; 98US-0082614P.

XX PR 23-NOV-1998; 98US-0109732P.

XX FA (GEST) GENSET.

XX COhen D, Blumenfeld M, Chumakov I;

XX WPI; 2000-013267/01.

XX Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.

XX Claim 8; Page 2091; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. the SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the

CC present invention

XX Sequence 21 BP; 6 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 15.2; DB 1; Length 21;
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;

XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 766 GGTTCTTCTTCAAGAGAAA 785
 |||||
 Db 21 GGTTCTTCTTCAAGAGAAA 2

RESULT 190

ABS98379/C

ID ABS98379 standard; DNA; 21 BP.

XX AC ABS98379;

XX DT 23-DEC-2002 (first entry)

XX DE Human multidrug resistance associated protein 3 polymorphic sequence #1.

XX Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;

KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;

KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRE3; NR1I2;

KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;

KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;

KW epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;

KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;

KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;

KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;

KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;

KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;

KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;

KW multidrug resistance associated protein 3; cancer; prostate;

KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;

KW altered drug metabolism; cardiovascular function; colorectal tumour;

KW central nervous system; pulmonary; immunological; SNP;

KW single nucleotide polymorphism.

XX OS Homo sapiens.

XX FN WO200257410-A2.

XX PD 25-JUL-2002.

XX PF 28-NOV-2001; 2001WO-US044838.

XX PR 28-NOV-2000; 2000US-00724389.

XX FA (DNAS-) DNA SCI LAB INC.

XX PI Guida M, Hall J;

XX WPI; 2002-698522/75.

XX Isolated nucleic acid molecules having polymorphisms in known human genes
 FT e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers
 PT for locating, identifying and characterizing the genes responsible for
 PT disorder-related traits.

XX Example 24; Page 152; 714pp; English.

XX This invention relates to the sequence of an isolated nucleic acid
 CC molecule comprising at least one base variation from that of a known
 CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
 CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1),
 CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
 CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
 CC inhibitor (DBI), epoxide hydrolase 2 (EPHX2), 5-lipoxygenase activating
 CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
 CC transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl

transferrase (NNMT), NADPH quinone oxidoreductase 2 (NQO2), sulfotransferrase thermolabile (STM), UDP-glucuronosyl transferase 2B4 (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance protein 3 (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3 (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence. The polymorphisms in the human genes cited in the invention are useful as genetic linkage markers for locating and characterising the genes that are responsible for specific traits within the genome and eventually identifying the genes responsible for a variety of disorder-related traits as a result of their e.g., overexpression, constitutive expression, mutation or underexpression, which may be used in diagnosing and/or treating the disorders. The nucleic acid molecules comprising the polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1, ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR, MDR1 and/or MDR3 are useful for screening individuals for altered drug metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2, AHR, MDR1 and/or MDR3 may also be used to screen individuals for susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are used to screen for altered cardiovascular function, in COX2 for altered susceptibility to colorectal tumours, in DBI or CHMR1 for altered central nervous system function, in FLAP and HMMT for altered pulmonary, immunological or haematological function, in KIK2 for altered serine protease activity in the prostate, in LTF for altered immunological or haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and peripheral nervous system function. The present sequence represents a polymorphic DNA sequence of the invention

Sequence 21 BP; 3 A; 3 C; 12 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1235 CAGCCCTCCCTCCGAGCCCC 1254
Db 20 CAGCCCTCCCTCCGAGCCCC 1

RESULT 191
AAV14108/c
ID AAV14108 standard; DNA; 18 BP.

XX AAV14108;

DT 27-AUG-2003 (revised)
DT 19-MAY-1998 (first entry)

DE Probe HBP274 for RT pol region of HBV.

XX Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
KW preCore region; HBsAg region; genotype specific target;
KW mutation detection; ss.

OS Synthetic.

OS Hepatitis B virus.

XX WO9740193-A2.

PD 30-OCT-1997.

PF 21-APR-1997; 97WO-BP002002.

XX 19-APR-1996; 96EP-00870053.

XX (INNO-) INNOGENETICS NV.

XX Stuyver L, Rossau R, Maertens G;

XX WPI; 1997-535867/49.

PT Detection and/or genetic analysis of hepatitis B virus - specifically

PT genotype, preCore mutations, vaccine escape mutations and RT gene
PT mutations selected by treatment with drugs.

XX Claim 5; Fig 1; 80pp; English.

XX This sequence represents a probe for the RT pol region of hepatitis b
virus (HBV). This sequence can be used in the method of the invention for
detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.
The method comprises: (a) optionally releasing, isolating or
concentrating polynucleic acids (I) in the sample, and amplifying the
relevant part of a suitable HBV gene in the sample with at least 1
suitable primer pair; (b) hybridising (I) with a combination of at least
2 nucleotide probes, which are applied to known locations on a solid
support and hybridise specifically to mutant target sequences chosen from
the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV
genotype specific target sequences, or their complements or U for T
homologues; (c) detecting the hybrids formed in step (b), and inferring
the HBV genotype and/or mutants present in the sample from the
differential hybridisation signal(s). The composition can be used to
diagnose and/or monitor HBV mutants and/or genotypes in a sample,
specifically genotype, preCore mutations, vaccine escape mutations and RT
gene mutations selected by treatment with drugs, e.g. lamivudine and
penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX Sequence 18 BP; 1 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 15; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 728 GCCAGGAGAACACAGA 742
Db 18 GCCAGGAGAACACAGA 4

RESULT 192

ABT05120/c

ID ABT05120 standard; DNA; 18 BP.

XX AC ABT05120;

DT 11-OCT-2002 (first entry)

DE TNFR1 expression modulation related antisense oligo SEQ ID No 150.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.

OS Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

PF 22-OCT-2001; 2001WO-US051224.

PR 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowsett LM, Zhang H, Dean NW;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
necrosis factor receptor 1 (TNFR1), useful for treating humans having
disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 18; Page 56; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in
length targeted to nucleic acid molecule encoding tumour necrosis factor

CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 5 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 15; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.3e+02;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1130 CCTTCACTCCAGCT 1144

Db 15 CCTTCACTCCAGCT 1

RESULT 193

AAV10706/C

ID AAV10706 standard; DNA; 19 BP.

XX AC AAV10706;

XX AC AAV10706;

XX 21-JUL-1998 (first entry)

XX Human breast cancer gene CH1-9a11-2 primer pchl-t7-5f.

XX Breast cancer; malignant transformation; diagnostic; therapeutic;

XX screening; primer; ss.

XX Synthetic.

XX Homo sapiens.

XX WO9738085-A2.

XX 16-OCT-1997.

XX 09-APR-1997; 97WO-US005930.

XX 10-APR-1996; 96US-0015167P.

XX 05-JUN-1996; 96WO-US009286.

XX 06-JUN-1996; 96US-0019202P.

XX 11-JUL-1996; 96US-00678280.

XX (CALP-) CALIFORNIA PACIFIC MEDICAL CENT RES INST.

XX Smith H, Chen L;

XX WPI; 1997-512705/47.

XX Breast cancer genes - used to develop products to design or screen

XX diagnostic reagents or therapeutic compounds.

XX Disclosure; Fig 7; 118pp; English.

XX AAV10702-V10719 are primers used in a method to identify the novel human

XX breast cancer gene CH1-9a11-2 by differential display. The identified

XX genes or fragments of these genes can be used for identifying genes and

XX gene products that are intimately related to malignant transformation or

XX maintenance of the malignant properties of cancer cells. It can also be

XX used to design or screen diagnostic reagents or therapeutic compounds.

XX Kits are included within the scope of the invention

XX SQ Sequence 19 BP; 7 A; 2 C; 8 G; 1 T; 0 U; 1 Other;

Query Match 0.7%; Score 15; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 928 TTATCCTCCTCTTC 942

Db 18 TTATCCTCCTCTTC 4

RESULT 194

AAV14301/C

ID AAV14301 standard; DNA; 20 BP.

XX AC AAV14301;

XX AC AAV14301;

XX 27-AUG-2003 (revised)

XX 19-MAY-1998 (first entry)

XX Probe HBP135 for Hepatitis b virus.

XX Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;

XX preCore region; HBsAg region; genotype specific target;

XX mutation detection; ss.

XX Synthetic.

XX Hepatitis B virus.

XX WO9740193-A2.

XX 30-OCT-1997.

XX 21-APR-1997; 97WO-EP002002.

XX 19-APR-1996; 96EP-00870053.

XX (INNO-) INNOGENETICS NV.

XX Stuyver L, Rossau R, Maertens G;

XX WPI; 1997-535867/49.

XX Detection and/or genetic analysis of hepatitis B virus - specifically

XX genotype, preCore mutations, vaccine escape mutations and RT gene

XX mutations selected by treatment with drugs.

XX Example 1; Page 29; 80pp; English.

XX This sequence represents a probe for hepatitis b virus (HBV), used in the

XX method of the invention for detection and/or genetic analysis of

XX hepatitis B virus (HBV) in a sample. The method comprises: (a) optionally

XX releasing, isolating or concentrating polynucleic acids (I) in the

XX sample, and amplifying the relevant part of a suitable HBV gene in the

XX sample with at least 1 suitable primer pair; (b) hybridising (I) with a

XX combination of at least 2 nucleotide probes, which are applied to known

XX locations on a solid support and hybridise specifically to mutant target

XX sequences chosen from the HBV RT pol gene region, HBV preCore region,

XX HBsAg region and/or HBV genotype specific target sequences, or their

XX complements or U for T homologues; (c) detecting the hybrids formed in

XX step (b), and inferring the HBV genotype and/or mutants present in the

XX sample from the differential hybridisation signal(s). The composition can

XX be used to diagnose and/or monitor HBV mutants and/or genotypes in a

XX sample, specifically genotype, preCore mutations, vaccine escape

XX mutations and RT gene mutations selected by treatment with drugs, e.g.

XX lamivudine and penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX SQ Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 0.7%; Score 15; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1.9e+02;

Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGCTCTTG 923

Db 17 ATTTCTTTGCTCTTG 1

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RESULT 195
AAAD09117/c
ID AAAD09117 standard; DNA; 20 BP.
XX
XX AC AAAD09117;
XX
XX DT 04-SEP-2001 (first entry)
XX
XX DE Hepatitis B virus genotype G DNA amplifying primer HBPr135.
XX
XX KW HBV genotype G; preCore; HBpol; polymerase; envelope protein; preS1;
KW preS2; surface antigen; HBsAg; HBx protein; vaccine; liver disease;
KW hepatitis; liver cancer; HBeAg; core antigen; PCR primer; ss.
XX
XX OS Hepatitis B virus.
XX
XX PN WO200138498-A2.
XX
XX PD 31-MAY-2001.
XX
XX PF 21-NOV-2000; 2000WO-US032108.
XX
XX PR 24-NOV-1999; 99US-0167206P.
XX
XX (PHAR-) PHARMASSET INC.
XX
XX FA (INNO-) INNOGENETICS NV.
XX
XX STuyver L, Schinazi R, De Gendt S, Van Geyt C, Zoulim F, Fried M,
PI Rossau R;
XX
XX DR WPI; 2001-367676/38.
XX
XX Novel hepatitis B virus genotype G, nucleic acids encoding virus,
PT polypeptides encoded by nucleic acids, useful for preparing vaccine to
PT treat or prevent the hepatitis B virus genotype G infection in a subject.
XX
XX Example; Page 39; 84pp; English.
XX
XX The present invention relates to hepatitis B virus (HBV) strain FRI,
CC genotype G DNA encoding PreCore/Core protein, HBpol, envelope (preS1,
CC preS2 and surface antigen HBsAg) and HBx proteins. HBV genotype G nucleic
CC acids and polypeptides are useful for diagnosing, prognosing and treating
CC infections caused by HBV genotype G. They can be used in a vaccine to
CC treat or prevent HBV genotype G infection. The HBV genotype G derived
CC nucleic acids and antibodies are useful for detecting HBV genotype G in a
CC sample or diagnosis of HBV genotype G infection. The presence of HBV
CC genotype G statistically correlates with the presence of liver damage
CC and/or liver cancer in the subject. The HBV genotype G core insert
CC peptide encoding nucleic acid is useful for designing monitoring assays
CC to study and predict the evolution of anti-HBe and anti-HBc antibodies
CC and HBeAg (genotype G e antigen) in patients infected with HBV. The
CC antibodies or antigens of HBV genotype G are useful for identifying a
CC stage of liver disease caused by HBV genotype G. The present sequence is
CC a PCR primer used to amplify hepatitis B virus (HBV) genotype G DNA
XX fragment
XX
XX SQ Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;
Query Match 0.7%; Score 15; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1.9e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 907 ATTTCTTTGCTCTTG 923
Db 17 ATTTCTTTGCTCTTG 1
RESULT 196
AAH77555/c
ID AAH77555 standard; DNA; 20 BP.
XX
XX AC AAH77555;
XX
XX DT 07-APR-1998 (first entry)
XX
XX DE 5' PCR primer for the HCV 5' UTR and capsid region.
XX
XX KW Recognition sequence; HCV; ribozyme; 5' untranslated region;
KW nucleocapsid coding region; hairpin ribozyme; RNA cleavage; treatment;
KW HCV infection; HCV contamination; PCR primer; ss.
XX

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DT 19-OCT-2001 (first entry)
XX
XX DE HBV HBPol/HBsAg region antisense primer HBPr 135.
XX
XX KW Hepatitis B virus; HBV; preCore; Core; preS1; preS2; HBs; HBx; HBPol;
KW HBsAg; antiviral; vaccine; genotype G; genotyping; HBeAg; HBeAg;
KW PCR primer; ss.
XX
XX OS Hepatitis B virus.
XX
XX PN WO200140279-A2.
XX
XX PD 07-JUN-2001.
XX
XX PF 20-NOV-2000; 2000WO-EP011526.
XX
XX PR 03-DEC-1999; 99EP-00870252.
XX
XX PR 07-DEC-1999; 99US-0169287P.
XX
XX (INNO-) INNOGENETICS NV.
XX
XX STuyver L, Van Geyt C, De Gendt S;
XX
XX WPI; 2001-374785/39.
XX
XX Novel isolated and/or purified hepatitis B virus polypeptide and
PT polynucleotide sequences that are phylogenetically different from HBV
PT genotype A-F molecules, useful for HBV diagnosis, prophylaxis and
PT therapy.
XX
XX Example 1; Page 10; 94pp; English.
XX
XX The invention relates to the complete nucleic acid sequence of a new
CC human hepatitis B virus (HBV) genotype, provisionally named genotype G.
CC This genotype was found with a high prevalence in patients chronically
CC infected with HBV and residing in Europe and the USA. The invention
CC relates to a fully defined sequence of 3248 nucleotides as given in
CC specification, a sequence with 92% identity to the given sequence, or
CC sequence that is degenerate to the mentioned sequences. These
CC polynucleotides are useful for HBV genotyping. The proteins encoded by
CC the polynucleotides are useful for detecting antibodies in a biological
CC sample. Ligands that bind to the proteins and antibodies directed against
CC the proteins are useful for detecting the proteins and for detecting
CC HBeAg and HBeAg (precore precursor proteins). They are also useful for
CC preparing a vaccine or medication for treating HBV infections. The
CC present sequence is one of a number of primers used to amplify HBV DNA in
CC examples demonstrating HBV genotyping and the detection of HBV genotype G
XX
XX SQ Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;
Query Match 0.7%; Score 15; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1.9e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 907 ATTTCTTTGCTCTTG 923
Db 17 ATTTCTTTGCTCTTG 1
RESULT 197
AAT90589/c
ID AAT90589 standard; DNA; 18 BP.
XX
XX AC AAT90589;
XX
XX DT 07-APR-1998 (first entry)
XX
XX DE 5' PCR primer for the HCV 5' UTR and capsid region.
XX
XX KW Recognition sequence; HCV; ribozyme; 5' untranslated region;
KW nucleocapsid coding region; hairpin ribozyme; RNA cleavage; treatment;
KW HCV infection; HCV contamination; PCR primer; ss.
XX

```


PT gene expression of a Hepatitis C Virus (HCV), useful for treating or
 PT preventing HCV infection.

XX Example 5; Col 15; 48pp; English.

XX The invention relates to a new ribozyme with the ability to inhibit
 CC replication, infectivity or gene expression of a Hepatitis C Virus (HCV)
 CC by cleaving the positive strand genomic RNA of HCV at a sequence having
 CC 15 bp. Also included are a nucleic acid encoding the ribozyme, a host
 CC cell containing the ribozyme or vector, a vector comprising a promoter
 CC operably linked to the nucleic acid, producing a ribozyme, interfering
 CC with HCV replication or gene expression in a cell infected in a cell
 CC culture with HCV or a composition comprising the ribozyme and a carrier
 CC or diluent. The ribozyme is useful for treating or preventing HCV
 CC infection. The present sequence is a reverse transcriptase (RT)-PCR
 CC primer used to amplify HCV coding regions for cloning into expression
 CC vectors

SQ Sequence 18 BP; 2 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 18;
 Best Local Similarity 88.9%; Pred. No. 1.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1204 CCTATCAGGGGGCTGAC 1221
 Db 18 CCCCATCAGGGGGCTGGC 1

RESULT 200

ID AAA66673
 AC AAA66673 standard; DNA; 19 BP.

XX AAA66673;

XX 09-OCT-2000 (first entry)

DE Dog genomic marker oligonucleotide sequence SEQ ID NO:535.

KW Dog; genome; genomic marker; radiation hybrid map; identification;
 KW chromosome location; gene marker; polymorphic microsatellite marker;
 KW phenotype; behaviour; pedigree; ss.

XX Canis familiaris.

XX WO2002029615-A2.

XX 25-MAY-2000.

XX 15-NOV-1999; 99WO-IB001907.

XX 13-NOV-1998; 98US-0108193P.

XX (CNRS) CNRS CENT NAT RECH SCI.

XX Galibert F, Andre C;

XX WPI; 2000-387821/33.

XX New radiation hybrid map of the dog, Canine familiaris, genome, useful
 PT for e.g. identifying genes implicated in phenotypic and behavioral traits
 PT or in genetic diseases and for studying dog pedigrees.

PS Claim 1; Page 76; 87pp; English.

XX The present invention describes a radiation hybrid map of the dog (Canine
 CC familiaris) genome comprising the genome location of a marker selected
 CC from AAA66139 to AAA66942. The radiation hybrid map is useful for
 CC identifying and localising dog genes, since it covers approximately 80 %
 CC of the dog genome and provides a dense map integrating different types
 CC (i.e. Type I and Type II) of markers. The map and the dog genome markers
 CC (or complementary sequences) are especially useful to identify genes
 CC responsible for phenotypic and behavioural traits in dogs, to identify

CC morbid genes, to analyse diseases and identify implicated genes in such
 CC diseases and their alleles, and to study dog pedigrees. They may also be
 CC useful for isolating corresponding human gene sequences e.g. genes
 CC involved in genetic diseases

SQ Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 1.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1075 AGTCCCACTCCAGGCTTC 1092
 Db 1 AGTCCCACTCCAGGCTTC 18

RESULT 201

ACA98830/C
 ID ACA98830 standard; DNA; 19 BP.

XX ACA98830;

XX 28-JUL-2003 (first entry)

XX Human CYP2C8 SNP detection PCR primer #270.

XX Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
 KW cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
 KW single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.

XX Homo sapiens.

XX WO20020299099-A2.

XX 12-DEC-2002.

XX 31-MAY-2002; 2002WO-EP006000.

XX 01-JUN-2001; 2001EP-00112899.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Penger A, Sprenger R, Brinkmann U;

XX WPI; 2003-167344/16.

XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
 PT 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
 PT arachidonic acid metabolism, cancer or cardiovascular diseases.

PS Claim 1; Page 53; 178pp; English.

XX The invention describes a new polynucleotide comprises a polynucleotide:
 CC (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
 CC in the specification; (b) encoding any of seven polypeptides having 7
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of
 CC hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for
 CC diagnosing or treating a disease, for preparing a diagnostic composition
 CC for diagnosing a disease, or for preparing a pharmaceutical composition
 CC for treating a disease. This disease includes arachidonic acid
 CC metabolism, cancer or cardiovascular diseases. This sequence represents a
 CC primer used to isolate regions of the human cytochrome P450 polypeptide
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
 CC (SNP) in that region of different individuals useful in disease diagnosis

SQ Sequence 19 BP; 7 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 1.8e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;


```

FT modified_base 1. .20
FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "All cytidine residues are 5-methyl cytidine"
FT modified_base 1. .5
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl nucleotides"
FT modified_base 16. .20
FT FT /*tag= d
FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl nucleotides"
XX
XX WO200164955-A1.
XX
XX 07-SEP-2001.
XX
XX 01-MAR-2001; 2001WO-US006572.
XX
XX 02-MAR-2000; 2000US-00517467.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Popoff I, Cowser LM;
XX
XX WPI; 2001-602570/68.
XX
XX Antisense compound useful for treating hyperproliferative, neurological,
XX inflammatory and autoimmune disorders and diabetes inhibits human PARP.
XX
XX Claim 3; Page 92; 168pp; English.
XX
XX The invention relates to antisense oligonucleotides targeted to human
XX PARP nucleic acid and inhibiting expression of human PARP. PARP (Poly
XX (ADP-ribose) polymerase plays an important role in chromatin
XX decondensation, DNA replication, DNA repair, gene expression, malignant
XX transformation, cellular differentiation and apoptosis. The antisense
XX oligonucleotide inhibitors are useful for inhibiting the expression of
XX PARP in human cells or tissues. They are also useful for treating a human
XX with a disease associated with PARP especially hyperproliferative
XX disorders (e.g. cancer), cellular injury resulting from oxidative stress,
XX neurological (e.g. parkinsonism, meningitis-associated intracranial
XX complications and ischaemia), inflammatory and autoimmune disorders (e.g
XX arthritis) and diabetes. The present sequence is an antisense
XX oligonucleotide of the invention
XX
XX Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 2.1e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1273 AAGTGGGAGGACAGCGCC 1290
XX ||||| ||||| ||||| ||||| |||||
XX 1 AAGTGTGAGGACAGCTCC 18
XX
XX RESULT 205
XX AAD19265
XX ID AAD19265 standard; DNA; 20 BP.
XX
XX AC AAD19265;
XX
XX 18-DEC-2001 (first entry)
XX
XX PCR primer #5, to detect polymorphism in mammalian IL-12 p40 intron 2.
XX
XX Interleukin-12; IL-12 p40; autoimmune disease; Th1/Th2 dysregulation;
XX therapy; TaqI+ allelic variant; insulin dependant diabetes mellitus;
XX IDDM; PCR primer; ss.
XX
XX Mammalia.
XX
XX

```

```

PN WO200173035-A1.
XX
XX 04-OCT-2001.
XX
XX 27-MAR-2001; 2001WO-AU000340.
XX
XX 27-MAR-2000; 2000AU-00006466.
XX
XX 15-MAY-2000; 2000US-0204366P.
XX
XX (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
XX
XX Morahan G;
XX
XX WPI; 2001-611629/70.
XX
XX Screening mammals for autoimmune diseases such as diabetes, comprises
XX identifying polymorphisms in interleukin (IL)-12 p40.
XX
XX Example 6; Page 41; 115pp; English.
XX
XX The patent discloses a method of screening mammals for autoimmune
XX diseases by identifying polymorphisms in interleukin (IL)-12 p40 gene.
XX The methods and kits of the invention are used for screening individuals,
XX families and populations for disease conditions or predispositions for
XX the development of a disease condition which is characterised,
XX exacerbated or associated with Th1/Th2 dysregulation in a mammal. They
XX are used to treat, prevent or diagnose autoimmune diseases such as IDDM
XX (Insulin dependant diabetes mellitus). The present DNA sequence is a PCR
XX primer which is used to detect polymorphism in mammalian IL-12 p40 intron
XX 2
XX
XX Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 2.1e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 971 GGAAGTCCAAAGCTCTACT 988
XX ||||| ||||| ||||| ||||| |||||
XX 2 GGAAGACTAAGCTCTACT 19
XX
XX Db
XX
XX RESULT 206
XX AAD19261
XX ID AAD19261 standard; DNA; 20 BP.
XX
XX AC AAD19261;
XX
XX 18-DEC-2001 (first entry)
XX
XX PCR primer #1, to detect polymorphism in mammalian IL-12 p40 intron 2.
XX
XX Interleukin-12; IL-12 p40; autoimmune disease; Th1/Th2 dysregulation;
XX therapy; TaqI+ allelic variant; insulin dependant diabetes mellitus;
XX IDDM; PCR primer; ss.
XX
XX Mammalia.
XX
XX WO200173035-A1.
XX
XX 04-OCT-2001.
XX
XX 27-MAR-2001; 2001WO-AU000340.
XX
XX 27-MAR-2000; 2000AU-00006466.
XX
XX 15-MAY-2000; 2000US-0204366P.
XX
XX (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
XX
XX Morahan G;
XX
XX WPI; 2001-611629/70.
XX
XX

```

PT Screening mammals for autoimmune diseases such as diabetes, comprises
 PT identifying polymorphisms in interleukin (IL)-12 p40.

XX Example 6; Page 41; 115pp; English.

XX The patent discloses a method of screening mammals for autoimmune
 CC diseases by identifying polymorphisms in interleukin (IL)-12 p40 gene.
 CC The methods and kits of the invention are used for screening individuals,
 CC families and populations for disease conditions or predispositions for
 CC the development of a disease condition which is characterised,
 CC exacerbated or associated with Th1/Th2 dysregulation in a mammal. They
 CC are used to treat, prevent or diagnose autoimmune diseases such as IDDM
 CC (Insulin dependant diabetes mellitus). The present DNA sequence is a PCR
 CC primer which is used to detect polymorphism in mammalian IL-12 p40 intron
 CC 2

XX Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 2.1e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 971 GGAAGTCCCAAGCTCTACT 988
 Db ||||| ||||| ||||| |||||
 2 GGAAGACTAAGCTCTACT 19

RESULT 207

AAAD19263
 ID AAD19263 standard; DNA; 20 BP.

XX AC AAD19263;

XX DT 18-DEC-2001 (first entry)

XX PCR primer #3, to detect polymorphism in mammalian IL-12 p40 intron 2.

XX Interleukin-12; IL-12 p40; autoimmune disease; Th1/Th2 dysregulation;
 KW therapy; Tag1+ allelic variant; insulin dependant diabetes mellitus;
 KW IDDM; PCR primer; ss.

XX Mammalia.

XX WO200173035-A1.

XX PD 04-OCT-2001.

XX PF 27-MAR-2001; 2001WO-AU000340.

XX PR 27-MAR-2000; 2000AU-00006466.

XX PR 15-MAY-2000; 2000US-0204366P.

XX PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.

XX PI Morahan G;

XX WPI; 2001-611629/70.

XX Screening mammals for autoimmune diseases such as diabetes, comprises
 PT identifying polymorphisms in interleukin (IL)-12 p40.

XX Example 6; Page 41; 115pp; English.

XX The patent discloses a method of screening mammals for autoimmune
 CC diseases by identifying polymorphisms in interleukin (IL)-12 p40 gene.
 CC The methods and kits of the invention are used for screening individuals,
 CC families and populations for disease conditions or predispositions for
 CC the development of a disease condition which is characterised,
 CC exacerbated or associated with Th1/Th2 dysregulation in a mammal. They
 CC are used to treat, prevent or diagnose autoimmune diseases such as IDDM
 CC (Insulin dependant diabetes mellitus). The present DNA sequence is a PCR
 CC primer which is used to detect polymorphism in mammalian IL-12 p40 intron
 CC 2

XX Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 2.1e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 971 GGAAGTCCCAAGCTCTACT 988
 Db ||||| ||||| ||||| |||||
 2 GGAAGACTAAGCTCTACT 19

RESULT 208

ABT13217

ID ABT13217 standard; DNA; 20 BP.

XX AC ABT13217;

XX DT 30-JAN-2003 (first entry)

XX Fanconi anaemia FANCD exon amplifying PCR primer SEQ ID No 120.

XX Cytostatic; dermatological; vasotropic; anti-anaemic; FA pathway defect;
 KW Fanconi anaemia protein complex; FANCD; DNA repair; Cockayne's syndrome;
 KW cell cycle abnormality; Fanconi anaemia; ataxia telangiectasia; cancer;
 KW Bloom's syndrome; Hereditary non-polyposis colon cancer; gene therapy;
 KW Xeroderma pigmentosum; PCR; primer; ss.

XX OS Unidentified.

XX WO200236761-A2.

XX PD 10-MAY-2002.

XX PF 02-NOV-2001; 2001WO-US045561.

XX PR 03-NOV-2000; 2000US-0245756P.

XX PA (DAND) DANA FARBER CANCER INST INC.

XX PI D'andrea AD, Taniguchi T, Timmers C, Grompe M;

XX WPI; 2002-519251/55.

XX Novel isolated Fanconi anemia protein complex polypeptide; termed FANCD2,
 PT useful for treating Fanconi anemia pathway defect in cell target or for
 PT treating patient with defective FANCD2 gene.

XX Claim 8; Page 55; 103pp; English.

XX The invention relates to an isolated Fanconi anaemia protein complex
 CC (FANCD2) polypeptide. The FANCD2 protein comprises a sequence of 1472
 CC amino acids fully defined in the specification, its 90% identical
 CC sequence, a sequence encoded by a polynucleotide that is at least 90%
 CC identical to sequences given in specification such as a 5127 base pair
 CC sequence, or a fragment which is at least 50 amino acids in length. The
 CC FANCD2 protein is useful for treating an FA pathway defect in a cell
 CC target or for treating a patient with a defective FANCD2 gene. The FANCD2
 CC gene is useful for making a recombinant expression vector. The FANCD2
 CC protein and its gene are useful as a novel target for therapeutic
 CC development, and in diagnostic test and screening assays for diseases
 CC associated with DNA repair and cell cycle abnormalities such as Fanconi
 CC anaemia, Bloom's syndrome, Cockayne's syndrome. Hereditary non-polyposis
 CC colon cancer, ataxia telangiectasia and Xeroderma pigmentosum. The FANCD2
 CC gene is useful in producing probes and primers for screening patients in
 CC genetic based test, for diagnosing Fanconi anaemia and cancer, for
 CC preparing an experimental mouse model for use in screening new
 CC therapeutics for treating conditions involving defective DNA repair, and
 CC in gene therapy methods. A recombinant vector containing the FANCD2 gene
 CC of the invention is useful in gene therapy. This polynucleotide sequence
 CC represents a PCR primer for amplifying a FANCD2 exon relating to the
 CC invention

SQ Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 2.1e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1062 AAACCAAGCTTCAGTCC 1079
 DB 3 AAACCAAGCTTCAGTCC 20

RESULT 209
 ABL58392
 ID ABL58392 standard; DNA; 20 BP.
 AC ABL58392;
 DT 30-JUL-2002 (first entry)
 XX Human PDE7a3 splice variant DNA amplifying primer PDE7a3For.
 KW Cyclic adenosine monophosphate; cAMP; cAMP phosphodiesterase type 7;
 KW PDE7a3; splice variant; transgenic; PCR; cardiant; antiinflammatory;
 KW antiallergic; antiaschmatic; antiinfertility; vaccine; primer; ss.
 OS Homo sapiens.
 XX Key Location/Qualifiers
 FT misc_feature 3
 FT /tag= a
 FT /note= "this nucleotide is indicated as G in the sequence
 listing"
 XX WO200183772-A1.
 PN 08-NOV-2001.
 XX 27-APR-2001; 2001WO-EF004785.
 XX 28-APR-2000; 2000EP-00109267.
 XX (MERE) MERCK PATENT GMBH.
 PA Kluxen F;
 PI WPI; 2002-034516/04.
 DR New polypeptide of splice variant of cyclic adenosine monophosphate
 PT phosphodiesterase type 7 and polynucleotides, useful as vaccines for
 PT inducing immune response against diseases e.g. cardiovascular diseases
 PT and asthma.
 XX Example; Page 27; 40pp; English.
 PS The invention relates to a cyclic adenosine monophosphate (cAMP)
 CC phosphodiesterase type 7 (PDE7a3) splice variant. The polypeptide can be
 CC expressed by standard recombinant methodology. The PDE7a3 splice variant
 CC polypeptides and polynucleotides are useful for treating cardiovascular
 CC diseases, asthma allergy, inflammatory diseases, fertility disorders and
 CC immunoregulator disorders. The polynucleotides are useful for producing
 CC transgenic animals, which include knock-in animals (in which an animal
 CC gene is replaced by human equivalent within the genome of the animal),
 CC useful in drug discovery process, for target validation. The PDE7a3
 CC splice variant polypeptides and polynucleotides are useful as vaccines
 CC for inducing an immunological response in a mammal. Sequences ABL58392-93
 CC represent PCR primers used to verify the existence of the novel PDE7a3
 XX SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 2.1e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.8; DB 1; Length 20;
 Best Local Similarity 88.9%; Pred. No. 2.1e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1128 CACCTTCACCTCCAGCTC 1145
 DB 3 CAGCTTCAGCTCCAGCTC 20

RESULT 210
 ABI96012/c
 ID ABI96012 standard; DNA; 20 BP.
 XX ABI96012;
 AC ABI96012;
 DT 16-FEB-2002 (first entry)
 XX Capture oligonucleotide Zip ID#3099 oligo #9.
 DE Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 KW oncogene; tumour suppressor; human papillomavirus; forensic;
 KW environmental monitoring; food industry; feed industry; ss.
 XX Synthetic.
 OS WO200179548-A2.
 XX PD 25-OCT-2001.
 XX 04-APR-2001; 2001WO-US010958.
 XX 14-APR-2000; 2000US-0197271P.
 XX (CORR) CORNELL RES FOUND INC.
 XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
 XX WPI; 2002-034366/04.
 XX Designing capture oligonucleotide probes for use on a support to which
 XX complementary oligonucleotides hybridize with little mismatch.
 PS Example 5; Fig 29; 300pp; English.
 CC The present invention describes a method (M1) for designing capture
 CC oligonucleotide probes (I) for use on a support to which complementary
 CC oligonucleotide probes (II) will hybridize with little mismatch, where
 CC (I) have melting temperatures within a narrow range. The method is useful
 CC for detecting infectious diseases caused by bacterial infectious agents
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
 CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 CC medinensis. The method is also useful for detecting genetic diseases such
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
 CC involved in DNA amplification, replication, recombination or repair, the
 CC cancer is specifically associated with a gene selected from BRCA1 gene,
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 CC method is also used for environmental monitoring, forensics and the food
 CC and feed industry, detecting comprises scanning (using e.g. a scanning
 CC electron microscope and infrared microscope) the support at the
 CC particular sites and identifying (if ligation of the oligonucleotide probe
 CC sets occurred and correlating (using a computer) identified ligation to a
 CC presence or absence of the target nucleotide sequences. ABI92074 to
 CC AB97546 represent oligonucleotide sequences used in the exemplification
 CC of the present invention
 XX SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

```
QY 1214 GGGCTGACCCATCCTTG 1231
Db 18 GGGCTGACTCCATCCGTG 1

RESULT 211
ABN86953/c
ID ABN86953 standard; DNA; 20 BP.
XX AC ABN86953;
XX DT 29-JUL-2002 (first entry)
XX DE Human NOV7 forward PCR primer SEQ ID NO:72.
XX KW Human; NOVX; cytostatic; antiarteriosclerotic; cardiovascular; lymphoma;
KW anti-diabetic; immunosuppressive; neuroprotective; gene therapy; cancer;
KW cardiomyopathy; atherosclerosis; cell signal processing; diabetes; AIDS;
KW metabolic pathway modulation; neoplastic; neurological disorder; asthma;
KW adenocarcinoma; prostate cancer; uterus cancer; immune response;
KW Crohn's disease; multiple sclerosis; Graft versus host disease;
KW PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200230974-A2.
XX PD 18-APR-2002.
XX PF 12-OCT-2001; 2001WO-US031922.
XX PR 12-OCT-2000; 2000US-0240113P.
XX PR 16-OCT-2000; 2000US-0240623P.
XX PR 16-OCT-2000; 2000US-0240637P.
XX PR 16-OCT-2000; 2000US-0240648P.
XX PR 16-OCT-2000; 2000US-0240662P.
XX PR 16-OCT-2000; 2000US-0240669P.
XX PR 16-OCT-2000; 2000US-0240703P.
XX PR 16-OCT-2000; 2000US-0240732P.
XX PR 16-OCT-2000; 2000US-0241190P.
XX PR 18-JAN-2001; 2001US-0262455P.
XX PA (CURA-) CURAGEN CORP.
XX PA (MILL/) MILLET I.
XX PI Grosse WM, Alsbrook JP, Lepley DM, Burgess CE, Mishra V;
PI Kekuda R, Li L, Padigar M, Shimkets RA, Zernhusen BD, Spytek KA;
PI Edinger S, Gerlach V, Macdougall J, Stone D, Gunther E, Ellerman K;
XX WPI; 2002-444172/47.
XX DR New NOVX polypeptides and polynucleotides, useful for treating or
XX PT preventing a NOVX-associated disorder or a pathological state in a
XX PT subject, particularly a human, e.g. cardiomyopathy, atherosclerosis,
XX PT cancer or diabetes.
XX PS Example 2; Page 205; 227pp; English.
XX CC The present invention describes novel human proteins designated NOVX
CC (where X is 1, 2a, 2b, 2c, 2d, 3, 4, 5, 6a, 6b, 7, 8, or 9). NOV1 is a
CC tyrosine-protein kinase 6-like protein; NOV2a-d are keratin 4-like
CC proteins; NOV3 is a collagen-like protein; NOV4 is a cystatin B-like
CC protein; NOV5 is a serotonin receptor-like protein; NOV6a and NOV6b are
CC cold inducible glycoprotein 30-like proteins; NOV7 is a matrilin-2-like
CC protein; NOV8 is a leukocyte surface antigen (CD53)-like protein; and
CC NOV9 is a tyrosine kinase-like protein. NOVX sequences have cytostatic,
CC antiarteriosclerotic, cardiovascular, anti-diabetic, immunosuppressive and
CC neuroprotective activities, and can be used in gene therapy. The NOVX
CC sequences can be used in therapeutics, particularly for treating,
CC preventing or alleviating a NOVX-associated disorder or a pathological
CC state in a subject, particularly a human. These disorders include
CC cardiomyopathy, atherosclerosis, a disorder related to cell signal
CC processing and metabolic pathway modulation or diabetes. The NOVX
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CC sequences are also useful for determining the presence of or
CC predisposition to a disease associated with altered levels of NOVX
CC polypeptide or nucleic acid, particularly cancer. The NOVX sequences are
CC especially useful in therapeutic or prophylactic applications for
CC neoplastic or neurological disorders, and in the treatment of
CC adenocarcinoma, lymphoma, prostate cancer, uterus cancer, immune
CC response, AIDS, asthma, Crohn's disease, multiple sclerosis or Graft
CC versus host disease. The present sequence represents a PCR primer for
CC human NOV7, which is used in an example from the present invention
XX SQ Sequence 20 BP; 7 A; 1 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1:33 TCACCTCCAGCTCCACCT 1150
Db 19 TCTCTCCAGCTCTCTCT 2

RESULT 212
RAD49357
ID AAD49357 standard; DNA; 20 BP.
XX AC AAD49357;
XX DT 07-MAR-2003 (first entry)
XX DE Mouse phospholipid scramblase I antisense oligo, ISIS #120567.
XX KW Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW inflammation; hyperproliferative; antisense therapy; phosphorothioate;
XX ss.
XX OS Mus musculus.
XX OS Synthetic.
XX FH Key
XX FT modified_base 1..20 Location/Qualifiers
FT /tag= a /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 2
FT /tag= d /mod_base= m5C
FT modified_base 5
FT /tag= e /mod_base= m5C
FT modified_base 8
FT /tag= f /mod_base= m5C
FT modified_base 10
FT /tag= g /mod_base= m5C
FT modified_base 11
FT /tag= h /mod_base= m5C
FT modified_base 13
FT /tag= i /mod_base= m5C
FT modified_base 14
FT /tag= j /mod_base= m5C
FT modified_base 16..20
FT /tag= c /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 19
```

```

FT FT      /*tag= k
XX XX      /mod_base= m5c
PN PN
XX WO200281495-A1.
XX 17-OCT-2002.
PD
XX 02-APR-2002; 2002WO-US010529.
XX PF
XX 05-APR-2001; 2001US-00828344.
XX PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Bennett CF, Wyatt JR;
XX WPI; 2003-058495/05.
XX
XX Novel antisense compounds targeted to nucleic acids encoding phospholipid
XX scramble I, for modulating gene expression and treating inflammation,
XX immune disorders and hyperproliferative conditions e.g. cancer.
XX
XX Claim 3; Page 80; 131pp; English.
XX
XX The invention relates to an antisense compound targetted to a nucleic
XX acid molecule encoding phospholipid scramble I and which specifically
XX hybridises with and inhibits the expression of phospholipid scramble I,
XX or which hybridises with at least an 8-nucleobase portion of an active
XX site on a nucleic acid molecule encoding phospholipid scramble I. The
XX invention is useful for inhibiting the expression of human phospholipid
XX scramble I in cells or tissues and for treating an animal having a
XX disease or condition associated with phospholipid scramble I, such as
XX inflammation, an immune disorder and a hyperproliferative condition, e.g.
XX cancer. The invention is useful for diagnostics, therapeutics and as
XX antisense oligonucleotide
XX
XX Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
SQ
Query Match      0.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1128 CACCTTCACCTCCAGTC 1145
Db      |||||
        2 CACCTTCACCTCCAGTC 19

RESULT 213
ADC42454
ID ADC42454 standard; DNA; 20 BP.
XX
XX ADC42454;
AC
XX 18-DEC-2003 (first entry)
DT
XX FANCD2 PCR primer MG789 SEQ ID NO:120.
DE
XX cancer; Fanconi Anaemia; FA; BRCA; cytostatic; microarray;
XX chemosensitising; ss; PCR; primer.
XX
XX Synthetic.
OS
XX WO2003039327-A2.
PN
XX 15-MAY-2003.
PD
XX
XX 06-JUN-2002; 2002WO-US018153.
PF
XX
XX 02-NOV-2001; 2001US-00998027.
PR
XX 02-NOV-2001; 2001WO-US045561.
PR
XX (DAND ) DANA FARBER CANCER INST.
PA
XX (UYOR-) UNIV OREGON HEALTH SCI.
PA

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XX
PI D'andrea AD, Taniguchi T, Timmers C, Grompe M, Fox EA;
XX WPI; 2003-441436/41.
XX
XX Diagnosing or determining cancer or increased risk of cancer in a
XX patient, by testing Fanconi Anemia/BRCA pathway gene or protein for a
XX cancer-associated defect, that indicates cancer or increased risk of
XX cancer.
XX
XX Claim 11; SEQ ID NO 120; 160pp; English.
XX
XX The invention relates to a novel method of diagnosing or determining if a
XX patient has cancer or is at increased risk of cancer, involving testing a
XX Fanconi Anaemia (FA)/BRCA pathway gene or protein for the presence of a
XX cancer-associated defect, where the presence of one or more cancer-
XX associated defects is indicative of cancer or an increased risk of cancer
XX in the patient. The method of the invention has cytostatic activity. The
XX method is useful for determining if a patient has cancer, or is at
XX increased risk of developing cancer, e.g. breast, ovarian or prostate
XX cancer. A microarray of the invention is useful for determining if a
XX patient has cancer, or is at increased risk of developing cancer, by
XX hybridising a nucleic acid sample to the nucleic acid sequences from the
XX array, and detecting the presence of mutations in FA/BRCA pathway genes
XX in the nucleic acid sample from the patient, where detecting the presence
XX of mutations is indicative of a patient who has cancer, or is at
XX increased risk of developing cancer. A method of the invention is useful
XX for screening a chemosensitising agent, and the agent obtained is useful
XX for treating a patient having a cancer. The present sequence is used in
XX the exemplification of the invention.
XX
XX Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match      0.7%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1062 AAACCCCAAGCTTCAGTCC 1079
Db      |||||
        3 AAACCCCAAGCTTCAGTCC 20

RESULT 214
AAQ58370
ID AAQ58370 standard; DNA; 21 BP.
XX
XX AAQ58370;
AC
XX 25-MAR-2003 (revised)
DT
XX 04-OCT-1994 (first entry)
DT
XX Antisense oligonucleotide targetted to HCV 5' end hairpin.
DE
XX Hepatitis C virus; HCV; non-A, non-B hepatitis virus; NANBHV;
XX antisense oligonucleotide; translation inhibition; therapy; ss.
XX
XX Synthetic.
OS
XX WO9405813-A1.
PN
XX 17-MAR-1994.
PD
XX
XX 10-SEP-1993; 93WO-JP001293.
PF
XX
XX 10-SEP-1992; 92US-00945289.
PR
XX 14-APR-1993; 93JP-00087195.
PR
XX (MOCH ) MOCHIDA PHARM CO LTD.
PA
XX (KAGA ) CEMO SERO THERAPEUTIC RES INST.
PA
XX (ISIS-) ISIS PHARM INC.
XX
XX Anderson KP, Hanecak RC, Hoshiko K, Nozaki C, Nishihara T;
XX Nakatake H, Hamada F, Eto T, Furukawa S;
PI

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XX WPI; 1994-101217/12.
 XX Anti-sense oligo:nucleotide(s) complementary to hepatitis C viral genome
 PT - useful for inhibiting HCV replication, to treat related diseases.
 XX
 XX PS Claim 5; Page 14; 91pp; English.
 XX
 XX Oligonucleotides which are complementary to part of the hepatitis C virus
 CC genomic or messenger RNA are claimed. Preferred antisense
 CC oligonucleotides (see AAQ58364-Q58387) are complementary to RNA
 CC comprising the 5' end hairpin loop, 5' end 6bp repeat, 5' end untranslated
 CC region, polypeptide translation initiation codon, ORF3 translation
 CC initiation codon, 3' untranslated region, 3' end palindromic region, R2
 CC sequence or 3' end hairpin loop of HCV. (Updated on 25-MAR-2003 to
 CC correct PN field.)
 XX
 XX SQ Sequence 21 BP; 2 A; 9 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 2.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1204 CCTATCAGGGGGCGTGC 1221
 Db 4 CCCCATCAGGGGGCTGGC 21
 RESULT 215
 AAZ21375
 ID AAZ21375 standard; DNA; 21 BP.
 AC AAZ21375;
 XX
 XX DT 02-DEC-1999 (first entry)
 XX
 XX DE Recombinant HIV-1 molecular clone construction primer #5.
 XX
 XX KW Human immunodeficiency virus type 1; HIV-1; viral; plasmid;
 KW molecular clone; recombinant; drug resistance; primer; ss.
 XX
 XX OS Synthetic.
 OS Human immunodeficiency virus 1.
 XX
 XX PN JP11239486-A.
 XX
 XX PD 07-SEP-1999.
 XX
 XX PF 07-OCT-1998; 98JP-00300376.
 XX
 XX PR 07-OCT-1997; 97US-00946021.
 XX
 XX PA (NIHA) JAPAN ENERGY CORP.
 XX
 XX DR WPI; 1999-554022/47.
 XX
 XX PT Recombinant human immunodeficiency type 1 virus - useful for assessment
 PT of drug resistance.
 XX
 XX PS Disclosure; Page 18; 30pp; Japanese.
 XX
 XX CC The present invention describes a recombinant human immunodeficiency type
 CC 1 virus (HIV-1) having a variation in the predetermined base in the
 CC region encoding for viral protease in comparison to HIV genome gene
 CC cloned in HIV-1 molecular clone pNL4-3, and having a (+) chain RNA genome
 CC with modifications of A at 2591st gene of the HIV genome into C, and A at
 CC 2594th into G, and a modified amino acid sequence corresponding to
 CC modified base in the region encoding for the virus derived protease, and
 CC optionally having a recombinant HIV-1 molecular clone with a plasmid
 CC composed of the same base sequence with that of the molecular clone pNL4-
 CC 3 in the residual base sequence. Also described are: (1) the plasmid of
 CC plasmid pNL-321,461,84V for the recombinant HIV-1 clone; and (2) plasmids
 CC pNL-Sma2 and pNL-delta-Pro2. The recombinant HIV-1 molecular clones can

CC be used for reliable assessment of drug resistance with the recombinant
 CC HIV-1. AAZ21352 to AAZ21392 represent primers used in the exemplification
 CC of the present invention
 XX
 XX SQ Sequence 21 BP; 6 A; 11 C; 0 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 2.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1135 ACCTCCAGCTCCACTAT 1152
 Db 3 ACCTCCAACTCCCTCAT 20
 RESULT 216
 AAF82554/c
 ID AAF82554 standard; DNA; 21 BP.
 XX
 XX AC AAF82554;
 XX
 XX DT 18-JUN-2001 (first entry)
 XX
 XX DE Human Atr-2 cDNA PCR primer SLQrev.
 XX
 XX KW Human; Atr-2; cell cycle checkpoint protein; cytostatic; gene therapy;
 KW phosphatidylinositol kinase; PIK; DNA damage repair; cancer;
 KW breast cancer; small cell carcinoma; brain tumour; bone cancer;
 KW PCR primer; ss.
 XX
 XX OS Homo sapiens.
 XX
 XX PN WO200127288-A1.
 XX
 XX PD 19-APR-2001.
 XX
 XX PF 13-OCT-2000; 2000WO-US028518.
 XX
 XX PR 14-OCT-1999; 99US-00417822.
 XX
 XX PA (ICOS-) ICOS CORP.
 XX
 XX PI Loughney K, Keegan KS;
 XX
 XX DR WPI; 2001-273777/28.
 XX
 XX PT Novel Atr-2 polypeptide and polynucleotide are used for the treatment of
 PT diseases associated with aberrant Atr-2 activity in different forms of
 PT cancer e.g. metastatic cancer, locally advanced tumors and bone cancer.
 XX
 XX PS Example 2; Page 42; 110pp; English.
 XX
 XX CC The present sequence was used to isolate clones containing the 3' end of
 CC the Atr-2 coding sequence. Atr-2 is a member of the phosphatidylinositol
 CC kinase (PIK)-related family of kinases, which are involved in cell cycle
 CC checkpoints and DNA damage repair. The Atr-2 polypeptide, antibodies
 CC against Atr-2, and modulators of Atr-2 activity are used to modulate
 CC disease states associated with Atr-2 expression and/or biological
 CC activity. Aberrant Atr-2 activity is associated with forms of cancer,
 CC e.g. metastatic cancer, locally advanced tumors, breast cancer, small
 CC cell carcinomas, intrinsic brain tumors and bone cancers. The anti-Atr-2
 CC antibodies can be used as detecting agents to detect or quantitate Atr-2
 XX
 XX SQ Sequence 21 BP; 4 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.8; DB 1; Length 21;
 Best Local Similarity 88.9%; Pred. No. 2.5e+02;
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 808 TGTAAGAAAGCCCTGAG 825
 Db 19 TGTAAGACAGCCTGAG 2

RESULT 217
ADE13666/c
ID ADE13666 standard; DNA; 21 BP.
XX
AC ADE13666;
XX
DT 29-JAN-2004 (first entry)
XX
DE RT-PCR primer #2 for rat CIRL-3 mRNA.
XX
XX Antisense; calcium-independent receptor alpha-laturotoxin-3; CIRL-3;
KW CIRL expression; ischaemic stroke; hippocampal neuron cell;
KW neurodegeneration; vasotropic; cerebroprotective; rat; CA1 neuron;
KW CA3 neuron; reverse transcription-PCR; RT-PCR; primer; ss.
XX
OS Rattus sp.
XX
XX US2003143738-A1.
XX
XX 31-JUL-2003.
XX
XX 08-NOV-2002; 2002US-00291046.
XX
XX 08-NOV-2001; 2001US-0336980P.
XX
XX (YOKO/) YOKOTA H.
PA (SUNH/) SUN H B.
PA (XUZC/) XU Z C.
PA (RUAN/) RUAN Y.
XX
XX Yokota H, Sun HB, Xu ZC, Ruan Y;
XX WPI; 2003-851786/79.
XX
XX New antisense oligonucleotide targeted to a nucleic acid molecule
PT encoding a calcium-independent receptor for alpha-laturotoxin, useful for
PT treating ischemic stroke.
XX
XX Example 1; SEQ ID NO 6; 18pp; English.
XX
XX The present invention relates to antisense molecules targeted to
CC polynucleotide sequences encoding calcium-independent receptor alpha-
CC laturotoxin (CIRL). The antisense molecule specifically hybridises with
CC the polynucleotide sequence encoding CIRL and inhibits the expression of
CC CIRL. Also disclosed is a method for inhibiting the expression of CIRL in
CC human cells or tissues in vitro. The antisense oligonucleotides and
CC method of the invention are useful for treating ischaemic stroke. The
CC antisense oligonucleotide enters hippocampal cells and binds specifically
CC to the polynucleotide sequence encoding CIRL. The oligonucleotide blocks
CC neurodegeneration of hippocampal neuron cells caused by ischaemia and it
CC comprises at least one modified internucleoside linkage. The modified
CC internucleoside linkage is a phosphorothioate linkage. The present
CC sequence represents a reverse transcription (RT)-PCR primer used to
CC analyse mRNA expression levels of CIRL in rat CA1 and CA3 neurons.
XX
SQ Sequence 21 BP; 3 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 2.5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 737 AACAGAACCCGTGTGCA 754
Db 21 AACAGAACCCGTGTGCA 4
RESULT 218
ADE86064/c
ID ADE86064 standard; DNA; 21 BP.
XX
AC ADE86064;
XX
XX

DT 29-JAN-2004 (first entry)
XX
DE PCR primer for detecting Escherichia coli rfbE gene.
XX
KW virulence; verocytotoxin; rfbE; PCR; primer; ss.
XX
OS Escherichia coli.
XX
XX WO2003062464-A2.
XX
XX 31-JUL-2003.
XX
XX 07-JAN-2003; 2003WO-CA000042.
XX
XX 23-JAN-2002; 2002US-0349981P.
XX
XX (CNDG) CANADA MIN HEALTH.
XX
XX Wang G, Rodgers FG;
XX WPI; 2003-902660/82.
XX
XX New primers for detecting Escherichia coli virulence-related genes using
PT a DNA amplification reaction are useful to detect E. coli serotype O157
PT H7 in food, environmental, veterinary and clinical samples.
XX
XX Claim 1; SEQ ID NO 17; 34pp; English.
XX
XX The present sequence is that of PCR primer rfbE-a, which corresponds to
CC nucleotides 673-693 of the rfbE gene of Escherichia coli. It is used with
CC primer rfbE-b ADE86065 to amplify a 327 bp portion of the gene. The
CC invention provides a single kit comprising 3 multiplex PCR assays that
CC can detect in E. coli the presence of the 8 virulence genes: eaeA, EHEC-
CC HlyA, Stx1 (VT1), Stx2 (VT2), Stx2c (VT2c), Stx2d (VT2d), Stx2e (VT2e)
CC and Stx2f (VT2f). The kit can also detect the 2 critical serotypes (O157
CC and H7) and identify the species (E. coli) simultaneously using a one-
CC step reaction. The kit comprises 11 primer pairs ADE86048-ADE86069. It is
CC useful for detecting E. coli serotype O157 H7 particularly in faecal,
CC environmental, veterinary, medical diagnostic and food samples,
CC especially environmental samples of drinking or recreational water, and
CC food samples of ground beef, apple juice, milk, salami, alfalfa sprouts
CC and lettuce. The primers are designed to target the coding regions of
CC genes and to avoid areas of homology within the structural genes for the
CC VT2 family. DNA was extracted from a positive reference E. coli strain
CC and used as a template in a standard PCR reaction using the primer sets.
CC Reliable amplification was obtained with all primer sets. As a negative
CC control all sets were tested with E. coli strain ATCC 25922 in which
CC only the control 16S rRNA band was amplified. Genomic DNAs from
CC Campylobacter jejuni and Aeromonas hydrophila were tested and none showed
CC specific PCR amplification.
XX
SQ Sequence 21 BP; 6 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 2.5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1125 TTCACCTTCACCTCCAG 1142
Db 18 TTCACCTTCACCTGTAG 1
RESULT 219
AAQ73380/c
ID AAQ73380 standard; DNA; 16 BP.
XX
XX AAQ73380;
XX
XX 25-MAR-2003 (revised)
DT 02-MAY-1995 (first entry)
XX
XX Anti-HSV-1 G4 oligo #5676.
XX

KW Hybridise; herpes simplex virus; HSV; open reading frame;
 KW translation initiation site; coding region; 5' UTR; ss.
 OS Synthetic.

PN WO9419945-A1.

PD 15-SEP-1994.

XX 07-MAR-1994; 94WO-US002471.

XX 12-MAR-1993; 93US-00031147.

XX (ISIS-) ISIS PHARM INC.

PI Draper KG, Crooke ST, Mirabelli CK, Ecker DJ, Hanecak R;

PI Anderson KP, Brown-Driver VL, Wyatt JR;

XX WPI; 1994-302552/37.

XX New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene -
 PT are used in the treatment and diagnosis of herpes simplex virus;
 PT cytomegalovirus, Epstein Barr virus and varicella zoster infections.

XX Claim 12; Page 36; 72pp; English.

XX The sequences given in AAQ73325-81 represent oligonucleotides which
 CC hybridise specifically with DNA or RNA from a herpes virus gene
 CC corresponding to one of the open reading frames UL5, -8, -9, -20, -27-
 CC 29, -30, -42, -52 or 1B175 of herpes simplex virus type 1 (HSV-1). These
 CC oligos pref. hybridise with a translation initiation site, a coding
 CC region or a 5' untranslated region. These oligos may be used in
 CC compositions for the treatment and diagnosis of herpes viral infection,
 CC by contacting the virus or the animal, or its cells, tissues or body
 CC fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)

SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 16;

Best Local Similarity 93.8%; Pred. No. 1.3e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 1;

QY 1251 CCCCATCCCCCAACCCC 1266

DB 16 CCCCAACCCCAACCCC 1

RESULT 220

AAQ61993/C

ID AAQ61993 standard; DNA; 16 BP.

XX AAQ61993;

XX 25-MAR-2003 (revised)

DT 04-NOV-1994 (first entry)

XX Guanine quartet containing oligomer, #4.

XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
 KW human cytomegalovirus; influenza virus; inflammation; telomere length;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.

OS Synthetic.

XX Key Location/Qualifiers

FT misc_feature 1..16

FT /*tag= a

FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.

XX 14-APR-1994.

XX 29-SEP-1993; 93WO-US009297.

XX 29-SEP-1992; 92US-00954185.

XX (ISIS-) ISIS PHARM INC.

PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;

PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;

XX WPI; 1994-135613/16.

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.

XX Disclosure; Page 106; 144pp; English.

XX The sequences given in AAQ61990-2001 are oligonucleotides which contain
 CC G4 or G3 stretches and which may be used for inhibiting replication of
 CC herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
 CC influenza virus, or for treating inflammatory and neurological disorders
 CC caused by phospholipase A2 activity in cases of hyper- proliferation,
 CC malignancy, cardiovascular disease and snake bite. Oligonucleotides such
 CC as these, may be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct PN field.)

SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 16;

Best Local Similarity 93.8%; Pred. No. 1.3e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 1;

QY 1251 CCCCATCCCCCAACCCC 1266

DB 16 CCCCAACCCCAACCCC 1

RESULT 221

AAQ61898/C

ID AAQ61898 standard; DNA; 16 BP.

XX AAQ61898;

XX 25-MAR-2003 (revised)

DT 04-NOV-1994 (first entry)

XX HSV replication inhibiting oligomer, ISIS no 5676.

XX Inhibition; replication; herpes simplex virus; HSV; HIV;
 KW human cytomegalovirus; influenza virus; inflammation;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy;
 KW telomere length; retard; aging; ss.

OS Synthetic.

XX Key Location/Qualifiers

FT misc_feature 1..16

FT /*tag= a

FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.

XX 14-APR-1994.

XX 29-SEP-1993; 93WO-US009297.

XX 29-SEP-1992; 92US-00954185.

XX (ISIS-) ISIS PHARM INC.

PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX WPI; 1994-135613/16.
 XX
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 XX
 XX Claim 5; Page 19; 144pp; English.
 XX
 XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
 CC which contain a G4 or two G3 stretches and which may be used for
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
 CC such as these may also be used for inhibiting activity of HIV, human
 CC cytomegalovirus or influenza virus, or for treating inflammatory and
 CC neurological disorders caused by phospholipase A2 activity in cases of
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.
 CC They may also be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 XX MAR-2003 to correct PN field.)
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.3e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1251 CCCCATCCCCCAACCCC 1266
 Db 16 CCCCAACCCCAACCCC 1
 RESULT 222
 AAQ61914/c
 ID AAQ61914 standard; DNA; 16 BP.
 XX
 XX AAQ61914;
 XX
 XX 25-MAR-2003 (revised)
 DT 04-NOV-1994 (first entry)
 XX
 XX HIV replication inhibiting oligomer, ISIS no 5669.
 XX
 XX Inhibition; replication; herpes simplex virus; HSV; HIV;
 KW human cytomegalovirus; influenza virus; inflammation;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy;
 KW telomere length; retard; aging; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH misc_feature 1..16
 FT /tag= a
 FT /note= "Phosphorothionate intersugar linkages"
 FT
 XX
 XX WO9408053-A1.
 XX
 XX 14-APR-1994.
 XX
 XX 29-SEP-1993; 93WO-US009297.
 XX
 XX 29-SEP-1992; 92US-00954185.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
 XX WPI; 1994-135613/16.
 XX
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity

PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.
 XX
 XX Disclosure; Page 23; 144pp; English.
 XX
 XX The sequences given in AAQ61913-16 are oligonucleotides which contain a
 CC G4 stretch and which may be used for inhibiting replication of human
 CC immunodeficiency virus (HIV). Oligonucleotides such as these may also be
 CC used for inhibiting activity of HSV, human cytomegalovirus or influenza
 CC virus, or for treating inflammatory and neurological disorders caused by
 CC phospholipase A2 activity in cases of hyper-proliferation, malignancy,
 CC cardiovascular disease and snake bite. They may also be used for
 CC inhibiting division of malignant cells by modulating telomere length,
 CC which may also retard aging. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.4; DB 1; Length 16;
 Best Local Similarity 93.8%; Pred. No. 1.3e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1251 CCCCATCCCCCAACCCC 1266
 Db 16 CCCCAACCCCAACCCC 1
 RESULT 223
 AAQ97986/c
 ID AAQ97986 standard; DNA; 16 BP.
 XX
 XX AAQ97986;
 XX
 XX 25-MAR-2003 (revised)
 DT 19-OCT-1995 (first entry)
 XX
 XX Peptide nucleic acid oligomer targeting HIV gene.
 XX
 XX Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
 KW antiviral; antisense; triple helix; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH misc_feature 1..16
 FT /tag= a
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine
 FT peptide residues, the nucleobase being attached
 FT covalently to the acetyl group and the peptide linkage
 FT being formed by condensation of the glycine carboxy group
 FT of one residue with the amino group of the 2-aminoethyl
 FT moiety in the next residue"
 XX
 XX WO9504068-A1.
 XX
 XX 09-FEB-1995.
 XX
 XX 28-JUL-1994; 94WO-US008517.
 XX
 XX 29-JUL-1993; 93US-00099718.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Ecker DJ;
 XX
 XX WPI; 1995-082179/11.
 XX
 XX Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid
 PT sub-unit - binds in complementary manner to DNA and RNA, and useful for
 PT modulating HIV viral activity, e.g. in treating AIDS.
 XX
 XX Claim 2; Page 176; 186pp; English.

XX New peptide nucleic acid (PNA) oligomers are provided which (a) consist
 CC of naturally occurring nucleobases covalently bound to a polyamide
 CC backbone and (b) hybridise to the translation initiation AUG region, 5'
 CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice
 CC junctions or coding sequence of a human immunodeficiency virus gene
 CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target
 CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene
 CC regulation moieties. They have utility as gene-targeted drugs for
 CC modulating HIV processes. Hence they can be used to treat AIDS and other
 CC viral infections. They are also useful in diagnostic applications and as
 CC research tools. PNA oligomers have high affinity for complementary single
 CC stranded DNA. They are also able to form triple helices in which a first
 CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the
 CC resulting double helix or with the first PNA strand. The PNAs possess no
 CC significant charge and are water soluble, which facilitates cellular
 CC uptake. Further, since they contain amides of non-biological amino acids,
 CC they are biostable and resistant to enzymatic degradation by proteases.
 CC The present sequence is a specifically claimed PNA sequence (represented
 CC by the sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-
 CC 2003 to correct EN field.)
 CC
 CC Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;
 CC
 CC Query Match 0.7%; Score 14.4; DB 1; Length 16;
 CC Best Local Similarity 93.8%; Pred. No. 1.3e+02;
 CC Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 CC
 CC QY 1251 CCCCATCCCCACCC 1266
 CC 16 CCCCAACCCCAACCC 1
 CC
 CC Db
 CC
 CC RESULT 224
 CC ABK00810/c
 CC ID ABK00810 standard; RNA; 17 BP.
 CC AC
 CC ABK00810;
 CC
 CC 12-MAR-2002 (first entry)
 CC DT
 CC Human NOGO Inozyme #80.
 CC DE
 CC
 CC Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 CC cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
 CC muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 CC DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
 CC B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 CC human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 CC MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;
 CC inflammatory arthropathy; central nervous system injury;
 CC cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 CC chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 CC Parkinson's disease; ataxia; Huntington's disease;
 CC Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 CC
 CC OS Homo sapiens.
 CC OS Synthetic.
 CC PN WO200159103-A2.
 CC FN
 CC 16-AUG-2001.
 CC PD
 CC
 CC 09-FEB-2001; 2001WO-US004273.
 CC PF
 CC
 CC 11-FEB-2000; 2000US-0181797P.
 CC PR 28-FEB-2000; 2000US-0185516P.
 CC PR 06-MAR-2000; 2000US-0187128P.
 CC
 CC (RIBO-) RIBOZYME PHARM INC.
 CC PA (BLAT/) BLATT L.
 CC PA (MCSW/) MCSWIGGEN J.
 CC PA (CHOW/) CHOWRIRA B M.

XX Blatt L, Mcswiggen J, Chowrira BM;
 XX WPI; 2001-607195/69.
 XX
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 CC constructs, which down regulate expression of a CD20 gene or neurite
 CC growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 CC central nervous system injury.
 CC
 CC Claim 88; Page 79; 200pp; English.
 CC
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a VGY motif). The CD20-targetting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-
 CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an inozyme of the invention
 CC
 CC Sequence 17 BP; 3 A; 2 C; 10 G; 0 T; 2 U; 0 Other;
 CC
 CC Query Match 0.7%; Score 14.4; DB 1; Length 17;
 CC Best Local Similarity 93.8%; Pred. No. 1.6e+02;
 CC Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 CC
 CC QY 1134 CACCTCCAGCTCCACC 1149
 CC 16 CACCTCCAGCTCCCTCC 1
 CC
 CC Db
 CC
 CC RESULT 225
 CC ACC51738/c
 CC ID ACC51738 standard; DNA; 17 BP.
 CC XX
 CC ACC51738;
 CC XX
 CC 27-JUN-2003 (first entry)
 CC DT
 CC
 CC Human tumour suppressor sequence #505.
 CC DE
 CC
 CC ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
 CC tumour regression; apoptosis; virus resistance; diagnosis;
 CC cellular degeneration.
 CC
 CC OS Homo sapiens.
 CC XX
 CC FR2826373-A1.
 CC XX

PD 27-DEC-2002.
 XX
 PF 20-JUN-2001; 2001PR-00008139.
 XX
 PR 20-JUN-2001; 2001PR-00008139.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB SA.
 XX
 XX Tuijnder M, Telerman A, Amson R;
 PI WPI; 2003-250498/25.
 XX
 DR New nucleic acid sequences associated with tumor suppression, regression,
 XX PT apoptosis or virus resistance are useful to diagnose and treat viral
 PT disease, development of tumor cells and cell degeneration.
 XX
 PS Claim 1; Page 157; 798pp; French.
 XX
 CC This sequence represents an isolated nucleic acid sequence associated
 CC with tumor suppression or regression, apoptosis or virus resistance. The
 CC invention relates to these sequences or sequences having at least 80%
 CC identity to them, and polypeptides encoded by the sequences or
 CC polypeptides having 80% identity to the polypeptide sequences. The
 CC invention is used to diagnose or treat viral disease or disease
 CC characterized by development of tumor cells or cellular degeneration
 XX
 SQ Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 XX
 QY 881 GCACCCACAGTGTGT 896
 DB 17 GCACCCACAGTGTGAT 2
 XX
 RESULT 226
 AAD53249/C
 ID AAD53249 standard; DNA; 17 BP.
 XX
 AC AAD53249;
 XX
 DT 28-MAY-2003 (first entry)
 XX
 DE PCR primer #14 used to construct Pz55Gag and p1-p6 hybrid.
 XX
 KW Twisted gastrulation; Tsg101; human immunodeficiency virus; HIV;
 KW gene therapy; peptide therapy; PCR; primer; ss.
 OS Unidentified.
 XX
 XX WO200294314-A1.
 XX
 XX 28-NOV-2002.
 XX
 PF 21-MAY-2002; 2002WO-US015965.
 XX
 PR 21-MAY-2001; 2001US-0292761P.
 XX
 PA (UUNY) UNIV NEW YORK STATE RES FOUND.
 XX
 PI Cohen SN, Carter C, Goff A, Ehrlich L;
 XX WPI; 2003-148440/14.
 XX
 DR Identifying twisted gastrulation 101 peptide, for treating human
 PT immunodeficiency virus (HIV) infection, comprises comparing the level of
 PT HIV viral particles in a mammalian cell culture to that in a control
 PT culture.
 XX
 XX Example 1; Col 22; 35pp; English.
 PS
 XX

CC The invention relates to a method of identifying a mammalian twisted
 CC gastrulation (Tsg) 101 peptide. The method involves measuring the level
 CC of human immunodeficiency virus (HIV) viral particles released in a
 CC culture of mammalian cells having an expression construct comprising a
 CC portion of the coding sequence of a mammalian Tsg101 gene and comparing
 CC the level of HIV viral particles to that in a culture of control
 CC mammalian cells. The method is useful in identifying a peptide that is
 CC effective in reducing HIV particle production or which may be used in
 CC treating a patient infected with HIV or other retrovirus. The invention
 CC is useful in gene therapy and peptide therapy. The present sequence is a
 CC PCR primer used to construct Pz55Gag and p1-p6 hybrid for expression in
 CC yeast. This primer is used to illustrate the method of the invention
 XX
 SQ Sequence 17 BP; 6 A; 6 C; 5 G; 0 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.6e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 XX
 QY 891 GCTGTGCCCCCTGGTC 906
 DB 16 GCTGTGCCCCCTGGTC 1
 XX
 RESULT 227
 ACD50662
 ID ACD50662 standard; RNA; 17 BP.
 XX
 AC ACD50662;
 XX
 DT 23-SEP-2003 (first entry)
 XX
 DE HBV hammerhead ribozyme substrate sequence #179.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; zinzyme;
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis B virus.
 XX
 XX WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 DR
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT

PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 XX infection.
 XX
 XX Example 1; Page 139; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyze sequences
 CC disclosed in the present invention
 XX
 SQ Sequence 17 BP; 2 A; 2 C; 1 G; 0 T; 12 U; 0 Other;
 Query Match 0.7%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 25.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 11; Mismatches 1; Indels 0; Gaps 0;
 QY 907 ATTTCTTTGTCCTTT 922
 |:::|:::|:::|:::|
 Db 2 AUUUUUUUUUUUUUU 17
 RESULT 228
 ACDS0664
 ID ACD50664 standard; RNA; 17 BP.
 XX
 AC ACD50664;
 XX
 DT 23-SEP-2003 (first entry)
 XX
 DE HBV hammerhead ribozyme substrate sequence #181.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinzyme;
 KW amberyze; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis B virus.
 XX
 DE
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGEN J.
 PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.
 PA (LSEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 XX WPI; 2003-229207/22.
 XX
 PT Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 XX Example 1; Page 139; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyze sequences
 CC disclosed in the present invention
 XX
 SQ Sequence 17 BP; 0 A; 2 C; 3 G; 0 T; 12 U; 0 Other;
 Query Match 0.7%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 25.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 11; Mismatches 1; Indels 0; Gaps 0;
 QY 908 TTTTCTTTGTCCTTTG 923
 |:::|:::|:::|:::|
 Db 1 UUUUUUUUUUUUU 16
 RESULT 229
 ADA50406
 ID ADA50406 standard; DNA; 17 BP.
 XX
 AC ADA50406;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Thermus scotoductus nucleic acid polymerase PCR primer SEQ ID NO:30.
 XX
 DE
 XX
 KW nucleic acid polymerase; enzyme; Thermus scotoductus; DNA polymerase;
 KW salt tolerance; thermostability; PCR primer; ss.
 XX
 OS Synthetic.
 OS Thermus scotoductus.
 XX
 PN WO2003066804-A2.
 XX
 PD 14-AUG-2003.
 XX
 PF 13-SEP-2002; 2002WO-US029102.
 XX
 PR 14-SEP-2001; 2001US-0322218P.
 PR 30-NOV-2001; 2001US-0334489P.
 XX
 XX (APPL-) APPLERA CORP.
 PA (BOLC-) BOLCHAKOVA E V.

```

PA (ROZZ/) ROZZELLE J E.
XX
PI Bolchakova EV, Rozzelle JE;
XX
XX WPI; 2003-663590/62.
DR
XX
XX New nucleic acid encoding a Thermus scotoductus strain X-1, ATCC Deposit
PT No. 27978 nucleic acid polymerase, useful for producing nucleic acid
PT polymerases having e.g., improved sequence discrimination or better salt
PT tolerance.
XX
XX Example 1; Page 79; 179pp; English.
XX
XX The present invention describes isolated nucleic acids encoding nucleic
CC acid polymerases from Thermus scotoductus. Also described: (1) an
CC isolated nucleic acid (I) encoding a nucleic acid polymerase from Thermus
CC scotoductus strain X-1, ATCC Deposit No. 27978; (2) an isolated DNA
CC polymerase polypeptide from Thermus scotoductus strain X-1, ATCC Deposit
CC No. 27978; (3) an isolated nucleic acid (II) comprising any of a set of
CC 12 nucleic acid sequences (S1, see ADA50425 to ADA50436) which encodes a
CC nucleic acid polymerase; (4) an isolated nucleic acid (III) encoding a
CC nucleic acid polymerase comprising any of a set of 16 amino acid
CC sequences (S2, see ADA50389 to ADA50404); (5) isolated nucleic acid
CC polymerases comprising any of amino acid sequences S2; (6) vectors
CC comprising (I), (II), or (III), and especially expression vectors in
CC which the nucleic acid polymerase gene is operably linked to a promoter;
CC (7) a host cell comprising an isolated nucleic acid molecule encoding a
CC nucleic acid polymerase from Thermus scotoductus strain X-1, ATCC Deposit
CC No. 27978; (8) a host cell comprising (I) or (II); (9) a kit comprising a
CC container containing a nucleic acid polymerase comprising any of amino
CC acid sequences S2; (10) preparing (M1) a nucleic acid polymerase
CC comprising any of amino acid sequences S2 by incubating a host cell
CC comprising an encoding nucleic acid under conditions sufficient for RNA
CC transcription and translation; (11) a nucleic acid polymerase prepared by
CC M1; (12) synthesizing DNA (M2) comprising contacting a polypeptide
CC comprising any of amino acid sequences S2 with a DNA under conditions
CC sufficient to permit DNA polymerization; (13) a method (M3) for
CC thermocyclic amplification of nucleic acid; and (14) a method (M4) of
CC primer extension. The nucleic acid is useful for producing nucleic acid
CC polymerases having improved sequence discrimination, better salt
CC tolerance or varying degrees of thermostability with applications e.g. in
CC PCR and DNA sequencing. The present sequence represents a PCR primer for
CC Thermus scotoductus nucleic acid polymerase, which is used in an example
XX from the present invention.
XX
SQ Sequence 17 BP; 3 A; 11 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. NO. 1.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1127 CCACCTTCACCTCCAG 1142
Db ||||| ||||| |||||
2 CCACCTTCACCTCCAG 17

RESULT 231
ADB44463/c
XX ID ADB44463 standard; DNA; 17 BP.
XX AC ADB44463;
XX DT 18-DEC-2003 (first entry)
XX DE Tumour suppression/reversion associated nucleotide #4786.
XX KW cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
XX KW primer; probe; tumour suppression; tumour reversion; apoptosis;
XX KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX KW diagnosis.
XX OS Homo sapiens.
XX PN WO2003040369-A2.
XX PD 15-MAY-2003.
XX PF 17-SEP-2002; 2002WO-IB004219.
XX PR 17-SEP-2001; 2001FR-00011991.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX

```

DR WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen,

PT useful e.g. for treatment of tumors and viral infection, also related

XX polypeptide and antibodies.

XX Disclosure; Page 591; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences,

CC fragments of at least 15 consecutive nucleotides of these nucleotides, a

CC sequence having at least 80% identity, after optimal alignment, with the

CC nucleotides, a sequence that hybridizes under stringent conditions with

CC the nucleotides, or the complement, or corresponding RNA, of the

CC nucleotides. The nucleotides are used as probes or primers for detecting,

CC identifying, quantifying and/or amplifying nucleic acids, as in vitro

CC sense and antisense sequences, of nucleotides involved in tumour

CC suppression or reversion, apoptosis and or viral resistance, to produce

CC recombinant polypeptides, and to prepare transgenic animals, as

CC experimental models. The nucleotides (also vectors containing them and

CC cells containing the vectors), the encoded polypeptides and antibodies

CC (Ab) against the polypeptide are useful for prevention and/or treatment

CC of viral infections or diseases characterized by development of tumours

CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis

CC and/or prognosis of these diseases. The nucleotides and polypeptides can

CC also be used to screen for their specific interactive molecules,

CC potentially useful for treating diseases associated with abnormal

CC expression of the nucleotides.

XX

SQ Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 1.6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 881 GCACACAGTCTGT 896

Db 17 GCACACAGTCTGTAT 2

RESULT 232

AAQ73381/c

ID AAQ73381 standard; DNA; 18 BP.

XX

AC AAQ73381;

XX

XX

DT 25-MAR-2003 (revised)

DT 02-MAY-1995 (first entry)

XX

XX

DE Anti-HSV-1 G4 oligo #5653.

XX

XX Hybridise; herpes simplex virus; HSV; open reading frame;

KW translation initiation site; coding region; 5' UTR; ss.

KW

XX

OS Synthetic.

XX

XX WO9419945-A1.

XX

XX 15-SEP-1994.

XX

XX 07-MAR-1994; 94WO-US002471.

XX

XX 12-MAR-1993; 93US-00031147.

XX

XX (ISIS-) ISIS PHARM INC.

XX

XX Draper KG, Crooke ST, Mirabelli CK, Ecker DJ, Hanecak R;

PI Anderson KP, Brown-Driver VL, Wyatt JR;

XX

XX WPI; 1994-302552/37.

XX

XX New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene -

PT are used in the treatment and diagnosis of herpes simplex virus,

PT

PT cytomegalovirus, Epstein Barr virus and varicella zoster infections.

XX

PS Claim 12; Page 36; 72pp; English.

XX

CC The sequences given in AAQ73325-81 represent oligonucleotides which

CC hybridise specifically with DNA or RNA from a herpes virus gene

CC corresponding to one of the open reading frames UL5, -8, -9, -20, -27-

CC 29, -30, -42, -52 or 1B175 of herpes simplex virus type 1 (HSV-1). These

CC oligos pref. hybridise with a translation initiation site, a coding

CC region or a 5' untranslated region. These oligos may be used in

CC compositions for the treatment and diagnosis of herpes viral infection,

CC by contacting the virus or the animal, or its cells, tissues or body

CC fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)

XX

SQ Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 1.9e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1251 CCCCATCCCAACCCC 1266

Db 18 CCCCAACCCCAACCCC 3

RESULT 233

AAQ61992/c

ID AAQ61992 standard; DNA; 18 BP.

XX

AC AAQ61992;

XX

XX

DT 25-MAR-2003 (revised)

DT 04-NOV-1994 (first entry)

XX

XX

DE Guanine quartet containing oligomer, #3.

XX

XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;

KW human cytomegalovirus; influenza virus; inflammation; telomere length;

KW neurological disorders; phospholipase A2 activity; hyperproliferation;

KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.

XX

OS Synthetic.

XX

XX Key Location/Qualifiers

FT misc_feature 1..18

FT /tag= a

FT /note= "Phosphorothionate intersugar linkages"

XX

XX WO9408053-A1.

XX

XX 14-APR-1994.

XX

XX 29-SEP-1993; 93WO-US009297.

XX

XX 29-SEP-1992; 92US-00954185.

XX

XX (ISIS-) ISIS PHARM INC.

XX

XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;

PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;

XX

XX WPI; 1994-135613/16.

XX

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity

PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length

PT of chromosomes.

XX

XX Disclosure; Page 105; 144pp; English.

XX

XX The sequences given in AAQ61990-2001 are oligonucleotides which contain

CC G4 or G3 stretches and which may be used for inhibiting replication of

CC herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or

CC influenza virus, or for treating inflammatory and neurological disorders

CC

CC caused by phospholipase A2 activity in cases of hyper- proliferation,
 CC malignancy, cardiovascular disease and snake bite. Oligonucleotides such
 CC as these, may be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct FN field.)

SQ Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.9e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCAACCCC 1266
 DB 18 CCCCAACCCCAACCCC 3

RESULT 234
 AAQ61897/c
 ID AAQ61897 standard; DNA; 18 BP.

AC AAQ61897;
 XX
 XX
 DT 25-MAR-2003 (revised)
 DT 04-NOV-1994 (first entry)
 XX
 DE HSV replication inhibiting oligomer, ISIS no 5653.

XX Inhibition; replication; herpes simplex virus; HSV; HIV;
 KW human cytomegalovirus; influenza virus; inflammation;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy;
 KW telomere length; retard; aging; ss.

OS Synthetic.

XX Key Location/Qualifiers
 FH misc_feature 1..18
 FT /tag= a
 FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.
 XX 14-APR-1994.

XX 29-SEP-1993; 93WO-US009297.

XX 29-SEP-1992; 92US-00954185.

XX (ISIS-) ISIS PHARM INC.

XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;

XX WPI; 1994-135613/16.

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.

XX Claim 5; Page 19; 14app; English.

XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
 CC which contain a G4 or two G3 stretches and which may be used for
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
 CC such as these may also be used for inhibiting activity of HIV, human
 CC cytomegalovirus or influenza virus, or for treating inflammatory and
 CC neurological disorders caused by phospholipase A2 activity in cases of
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.
 CC They may also be used for inhibiting division of malignant cells by
 CC modulating telomere length, which may also retard aging. (Updated on 25-
 CC MAR-2003 to correct FN field.)

SQ Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.9e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCAACCCC 1266
 DB 18 CCCCAACCCCAACCCC 3

RESULT 235
 AAQ61913/c
 ID AAQ61913 standard; DNA; 18 BP.

AC AAQ61913;
 XX
 XX
 DT 25-MAR-2003 (revised)
 DT 04-NOV-1994 (first entry)
 XX
 DE HIV replication inhibiting oligomer, ISIS no 5666.

XX Inhibition; replication; herpes simplex virus; HSV; HIV;
 KW human cytomegalovirus; influenza virus; inflammation;
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;
 KW malignancy; cardiovascular disease; snake bite; malignancy;
 KW telomere length; retard; aging; ss.

OS Synthetic.

XX Key Location/Qualifiers
 FH misc_feature 1..18
 FT /tag= a
 FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.

XX 14-APR-1994.

XX 29-SEP-1993; 93WO-US009297.

XX 29-SEP-1992; 92US-00954185.

XX (ISIS-) ISIS PHARM INC.

XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;

XX WPI; 1994-135613/16.

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
 PT of chromosomes.

XX Disclosure; Page 23; 14app; English.

XX The sequences given in AAQ61913-16 are oligonucleotides which contain a
 CC G4 stretch and which may be used for inhibiting replication of human
 CC immunodeficiency virus (HIV). Oligonucleotides such as these may also be
 CC used for inhibiting activity of HSV, human cytomegalovirus or influenza
 CC virus, or for treating inflammatory and neurological disorders caused by
 CC phospholipase A2 activity in cases of hyper- proliferation, malignancy,
 CC cardiovascular disease and snake bite. They may also be used for
 CC inhibiting division of malignant cells by modulating telomere length,
 CC which may also retard aging. (Updated on 25-MAR-2003 to correct FN
 CC field.)

XX Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 18;
 Best Local Similarity 93.8%; Pred. No. 1.9e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;


```

Db      17 CCATCCCAACCCCTCT 2
RESULT 238
AAA38182
ID   AAA38182 standard; DNA; 19 BP.
XX
XX   AAA38182;
XX
XX   15-SEP-2003 (revised)
DT
DT   01-SEP-2000 (first entry)
XX
DE   Primer used in the analysis of a BVDV genome fragment.
XX
XX   Primer; bovine viral diarrhoea virus; BVDV; nucleic acid analysis;
KW   diagnosis; pathological organism; detect; ss.
XX
XX   Pestivirus type 1.
OS
XX
XX   WO200020628-A1.
FN
XX
XX   13-APR-2000.
XX
XX   01-OCT-1999; 99WO-CA000915.
PF
XX
XX   01-OCT-1998; 98US-00165264.
PR
XX
XX   (BIOI-) BIO-ID DIAGNOSTIC INC.
PA
XX
XX   Vinayagamoorthy T;
PI
XX
XX   WPI; 2000-303800/26.
DR
XX
XX   Nucleic acid analysis methods for simultaneously analyzing multiple
PT   nucleic acid regions for diagnosis and differentiation of pathological
PT   organisms comprises sequencing the nucleic acids in the reaction mixture.
XX
XX   Example 2; Page 23; 36pp; English.
XX
XX   This sequence represents a primer used in the analysis of a fragment of
CC   the bovine viral diarrhoea virus (BVDV) genome. The primer is used to
CC   illustrate the nucleic acid analysis methods of the invention. The
CC   methods are used for sequencing a nucleic acid in a mixture comprising
CC   two nucleic acid target sequences. The methods are used for
CC   simultaneously analysing multiple nucleic acid regions in a single
CC   reaction. This can allow the reliable diagnosis and differentiation of
CC   pathological organisms. The methods can be adapted to use a series of
CC   primers with additional sequences which allows the size of the amplified
CC   region to be increased. The technique is especially useful when the usual
CC   sequence of the region to be detected is known and the assay is being
CC   carried out to confirm its presence e.g. to rule out a falsely positive
CC   amplification reaction or to distinguish subsets of an organism of
CC   interest or allelic forms of a gene associated with a disease or
CC   predisposition to a disease. (Updated on 15-SEP-2003 to standardise OS
CC   field)
XX
XX   Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match      0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1198 GCACACCCCTATCAGG 1213
      ||| ||||| ||||| |||||
Db      4 GCAGCACCCCTATCAGG 19

RESULT 239
AAA85677/c
ID   AAA85677 standard; DNA; 19 BP.
XX
XX   AAA85677;
XX
XX   Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match      0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1198 GCACACCCCTATCAGG 1213
      ||| ||||| ||||| |||||
Db      4 GCAGCACCCCTATCAGG 19

RESULT 238
AAA38182
ID   AAA38182 standard; DNA; 19 BP.
XX
XX   AAA38182;
XX
XX   15-SEP-2003 (revised)
DT
DT   01-SEP-2000 (first entry)
XX
DE   Primer used in the analysis of a BVDV genome fragment.
XX
XX   Primer; bovine viral diarrhoea virus; BVDV; nucleic acid analysis;
KW   diagnosis; pathological organism; detect; ss.
XX
XX   Pestivirus type 1.
OS
XX
XX   WO200020628-A1.
FN
XX
XX   13-APR-2000.
XX
XX   01-OCT-1999; 99WO-CA000915.
PF
XX
XX   01-OCT-1998; 98US-00165264.
PR
XX
XX   (BIOI-) BIO-ID DIAGNOSTIC INC.
PA
XX
XX   Vinayagamoorthy T;
PI
XX
XX   WPI; 2000-303800/26.
DR
XX
XX   Nucleic acid analysis methods for simultaneously analyzing multiple
PT   nucleic acid regions for diagnosis and differentiation of pathological
PT   organisms comprises sequencing the nucleic acids in the reaction mixture.
XX
XX   Example 2; Page 23; 36pp; English.
XX
XX   This sequence represents a primer used in the analysis of a fragment of
CC   the bovine viral diarrhoea virus (BVDV) genome. The primer is used to
CC   illustrate the nucleic acid analysis methods of the invention. The
CC   methods are used for sequencing a nucleic acid in a mixture comprising
CC   two nucleic acid target sequences. The methods are used for
CC   simultaneously analysing multiple nucleic acid regions in a single
CC   reaction. This can allow the reliable diagnosis and differentiation of
CC   pathological organisms. The methods can be adapted to use a series of
CC   primers with additional sequences which allows the size of the amplified
CC   region to be increased. The technique is especially useful when the usual
CC   sequence of the region to be detected is known and the assay is being
CC   carried out to confirm its presence e.g. to rule out a falsely positive
CC   amplification reaction or to distinguish subsets of an organism of
CC   interest or allelic forms of a gene associated with a disease or
CC   predisposition to a disease. (Updated on 15-SEP-2003 to standardise OS
CC   field)
XX
XX   Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match      0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      733 GAGAAACGAGAACCG 748
      ||||| ||||| ||||| |||||
Db      19 GAGAAACGAGAACCG 4

RESULT 240
AAH60839/c
ID   AAH60839 standard; DNA; 19 BP.
XX
XX   AAH60839;
XX
XX   10-SEP-2001 (first entry)
DT
XX
XX   Cyclin B1 ribozyme binding site SEQ ID NO:3263.
DE
XX
XX   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulneryary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW   antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;
KW   antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;
KW   atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW   basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW   sickle cell retinopathy; ss.
XX
XX   Homo sapiens.
OS
XX   Synthetic.
XX
XX   WO200130362-A2.
FN

```


Example 2; Page 53; 178pp; English.

PS The invention describes a new polynucleotide comprises a polynucleotide:
 XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
 CC in the specification; (b) encoding any of seven polypeptides having 7
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of
 CC hybridizing to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for
 CC diagnosing or treating a disease, for preparing a diagnostic composition
 CC for diagnosing a disease, or for preparing a pharmaceutical composition
 CC for treating a disease. This disease includes arachidonic acid
 CC metabolism, cancer or cardiovascular diseases. This sequence represents a
 CC primer used to isolate regions of the human cytochrome P450 polypeptide
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
 CC (SNP) in that region of different individuals useful in disease diagnosis

XX Sequence 19 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 1 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 19;
 Best Local Similarity 83.3%; Pred. No. 2.3e+02;
 Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 896 TGCCCTCGTCATTTCCT 913
 Db 19 TGACCCCTGGYCACTTCT 2

RESULT 243

AAAT87852
 ID AAT87852 standard; DNA; 20 BP.

AC AAT87852;

DT 25-MAR-2003 (revised)
 XX 20-APR-1998 (first entry)

DE Human HCV RNA anti-sense PCR primer RB-6B.

XX Hepatitis C virus; HCV; detection; diagnostic; single stranded;
 KW double stranded; separation; ss.

XX Synthetic.
 OS Hepatitis C virus; Virus.

XX WO9737040-A2.

XX 09-OCT-1997.

XX 03-APR-1997; 97WO-NL000167.

XX 03-APR-1996; 96NL-01002781.

XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.

XX Goudsmit J, Beld MGHM, Sol CVA, Boom WR;

XX WPI; 1997-503120/46.

XX Separation of single and double stranded hepatitis C virus RNA - using
 PT liquid comprising chaotropic agent and nucleic acid binding phase,
 PT particularly silica particles.

XX Disclosure; Page 15; 41pp; English.

XX PCR primers AAT87852 and AAT87853 are used to amplify nucleic acid from
 CC the Hepatitis C Virus (HCV) for use in a novel method for separating
 CC single stranded HCV RNA from double stranded HCV RNA. This method
 CC involves contacting the sample with a liquid comprising a chaotropic
 CC agent and a nucleic acid binding solid phase, having a composition so
 CC that double stranded nucleic acid binds the solid phase and single
 CC stranded nucleic acid does not, and separating the solid phase from the
 CC supernatant. This method can be used to separate and detect causative

CC agents of hepatitis from each other and host material. (Updated on 25-MAR
 CC -2003 to correct PR field.)

XX Sequence 20 BP; 4 A; 8 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 83.3%; Pred. No. 2.7e+02;
 Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1196 TGGCACCACCTATCAGG 1213
 Db 3 TCGCMGCACCTATCAGG 20

RESULT 244

AAV19519/c

ID AAV19519 standard; DNA; 20 BP.

AC AAV19519;

DT 16-JUL-1998 (first entry)

DE Retroviral DNA base sequences amplifying primer M29.

XX Retrovirus; AIDS; serum; HIV; human immunodeficiency virus;
 KW antigen measurement; diagnosis; nested PCR primer; ss.

XX Synthetic.

OS Human immunodeficiency virus 2.

XX JP10094394-A.

XX 14-APR-1998.

XX 20-SEP-1996; 96JP-00271467.

XX 20-SEP-1996; 96JP-00271467.

XX (EIKE) EIKEN KAGAKU KK.

XX WPI; 1998-279230/25.

XX Retrovirus reacting with AIDS patient serum - useful for the exact
 PT diagnosis of an unknown AIDS causing virus.

XX Example; Page 7; 16pp; Japanese.

XX This primer is used in the nested PCR amplification of the DNA base
 CC sequences isolated from a retrovirus particle collected from the blood of
 CC an AIDS patient. The specification provides DNA base sequences encoding a
 CC retroviral protein which reacts with serum of AIDS patients. It provides
 CC an antigen for the detection of an antibody against retrovirus which
 CC consists of a peptide derived from these base sequences. The invention
 CC provides a method for antigen measurement in which the above antigen is
 CC contacted with a sample blood to determine immunoglobulin reacting with
 CC the antigen and a method for screening the infection of retrovirus other
 CC than HIV-1, HIV-2 subtype A which can be collected from an AIDS patient
 CC blood by the above antibody measurement. The method can diagnose exactly
 CC an unknown AIDS-causing virus

XX Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 20;
 Best Local Similarity 93.8%; Pred. No. 2.7e+02;
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1033 GAAGGAACCTACTACTA 1048

Db 20 GCAGGAACCTACTACTA 5

RESULT 245

AAV32006/c

```

ID AAV32006 standard; cDNA; 20 BP.
XX
AC AAV32006;
XX
DT 28-SEP-1998 (first entry)
XX
XX Flax SAD gene promoter primer oligonucleotide OL-39.
DE DE1 gene; SAD2 gene; stearoyl-acyl carrier protein desaturase; flax;
KW fatty acid; lipid; oilseed; promoter; transgenic plant; flax; probe; ss.
XX
OS Synthetic.
OS Linum usitatissimum.
XX
XX WO9818948-A1.
XX
XX 07-MAY-1998.
XX
XX 30-OCT-1997; 97WO-CA000812.
XX
XX 31-OCT-1996; 96US-0029416P.
XX
XX (CANADA) NAT RES COUNCIL CANADA.
XX
XX Jain RK, Thompson RG, Rowland GG, McHughen AG, Mackenzie SL;
XX Taylor DC;
XX
XX WPI; 1998-272237/24.
XX
XX Isolated flax gene - used to develop products for modifying plants,
XX particularly for modifying fatty acids of membrane and storage lipid(s)
XX of plants.
XX
XX Disclosure; Page 12; 62pp; English.
XX
XX Oligonucleotide OL-39 corresponds to nucleotides 234-253 of the non-
XX coding strand of a published cDNA sequence for flax stearoyl-acyl carrier
XX protein desaturase (SAD) cDNA. It was used as a PCR primer, together with
XX oligonucleotide primer OL-110 (see AAV32007), in an inverse PCR
XX amplification of flax genomic DNA. The 5' regulatory regions (see
XX AAV32000-01) of the flax SAD1 and SAD2 genes (see also AAV31998-99) were
XX obtained. These SAD gene promoter sequences can be used to enhance or
XX enable the expression of genes introduced into flax or other plants,
XX especially to manipulate the fatty acids of membrane and storage
XX lipids
XX
XX Sequence 20 BP; 5 A; 1 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 CAGTTCACCTCCACC 1137
DB |||||
18 CAGTTCACCTCCACC 3

RESULT 246
AAV22562/c
ID AAV22562 standard; DNA; 20 BP.
XX
AC AAV22562;
XX
XX 08-JUL-1998 (first entry)
XX
XX Antisense oligonucleotide designed to target the R1 message.
XX
XX R1 subunit; ribonucleotide reductase; cell proliferation; tumour cell;
XX antisense; growth; inhibition; sensitivity; hydroxyurea;
XX chemotherapeutic drug; methotrexate; PALA; treatment; ss.
XX
XX Synthetic.
XX Homo sapiens.

Query Match 0.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 908 TTTCCTTTGCTCTTG 923
DB |||||
18 TTTCCTTTGCTCTTG 3

RESULT 247
AAC69238
ID AAC69238 standard; DNA; 20 BP.
XX
AC AAC69238;
XX
XX 29-JAN-2001 (first entry)
XX
XX Human ABC1 gene exon 34 3' PCR primer, SEQ ID NO:137.
XX
XX Human ABC1 cholesterol transporter; chromosome 9q31;
XX ATP-binding cassette; HDL deficiency disorder; high density lipoprotein;
XX Tangier disease; TD; familial HDL deficiency; FHA; polymorphism;
XX cardiovascular disease; coronary artery disease; coronary restenosis;
XX cerebrovascular disease; peripheral vascular disease;
XX Alzheimer's disease; Niemann-Pick disease; Huntington's disease;
XX X-linked adrenoleukodystrophy; cancer; gene therapy; genetic diagnosis;
XX prognosis; prophylaxis; drug screening; transgenic animal; PCR primer;
XX ss,
XX Homo sapiens.
XX WO20005318-A2.
XX 21-SEP-2000.

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XX WO9805769-A2.
XX
XX 12-FEB-1998.
XX
XX 01-AUG-1997; 97WO-CA000540.
XX
XX 02-AUG-1996; 96US-0023040P.
XX
XX 07-MAR-1997; 97US-0039959P.
XX
XX (GENE-) GENESENSE TECHNOLOGIES INC.
XX
XX Wright JA, Young AH;
XX
XX WPI; 1998-145609/13.
XX
XX Antisense oligonucleotides to ribonucleotide reductase genes - used to
XX modulate tumour growth and inhibit tumour cell proliferation.
XX
XX Claim 8; Page 48; 79pp; English.
XX
XX AAV22531-89 represent antisense oligonucleotides which are targeted
XX against the mRNA of the R1 subunit sequence of ribonucleotide reductase.
XX Aberrant expression of the R2 gene, which encodes the second subunit of
XX the ribonucleotide reductase gene, can determine the malignant
XX characteristics of cells. Suppression of R2 and R1 gene expression was
XX found to reduce transformed properties of tumour cells. The antisense
XX oligonucleotides can be used for modulating tumour cell growth, or for
XX inhibiting tumour cell proliferation. They can also be used for
XX increasing the sensitivity of neoplastic cells to chemotherapeutic drugs
XX (especially to hydroxyurea, methotrexate (MTX), and PALA). The antisense
XX oligonucleotides may be used to treat proliferative disorders including
XX leukaemias, lymphomas, sarcomas, melanomas, various other forms of
XX cancer, papillomas, arthrogelerosis, psoriasis, polychemia, mastocytosis,
XX autoimmune diseases, angiogenesis, bacterial infections and viral
XX infections (including HIV hepatitis, or herpes infections)
XX
XX Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 908 TTTCCTTTGCTCTTG 923
DB |||||
18 TTTCCTTTGCTCTTG 3

RESULT 247
AAC69238
ID AAC69238 standard; DNA; 20 BP.
XX
AC AAC69238;
XX
XX 29-JAN-2001 (first entry)
XX
XX Human ABC1 gene exon 34 3' PCR primer, SEQ ID NO:137.
XX
XX Human ABC1 cholesterol transporter; chromosome 9q31;
XX ATP-binding cassette; HDL deficiency disorder; high density lipoprotein;
XX Tangier disease; TD; familial HDL deficiency; FHA; polymorphism;
XX cardiovascular disease; coronary artery disease; coronary restenosis;
XX cerebrovascular disease; peripheral vascular disease;
XX Alzheimer's disease; Niemann-Pick disease; Huntington's disease;
XX X-linked adrenoleukodystrophy; cancer; gene therapy; genetic diagnosis;
XX prognosis; prophylaxis; drug screening; transgenic animal; PCR primer;
XX ss,
XX Homo sapiens.
XX WO20005318-A2.
XX 21-SEP-2000.

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```
XX 15-MAR-2000; 2000WO-IB000532.
XX 15-MAR-1999; 99US-0124702P.
PR 08-JUN-1999; 99US-0138048P.
PR 17-JUN-1999; 99US-0139600P.
PR 01-SEP-1999; 99US-0151977P.
XX (UYBR-) UNIV BRITISH COLUMBIA.
PA (XENO-) XENON BIORESEARCH INC.
XX Hayden MR, Wilson AR, Pimstone SN;
XX WPI; 2000-587528/55.
XX New ABC1 polypeptide is useful for treating diseases associated with ABC1
XX biological activity, e.g. Alzheimer's disease, Huntington's disease and
XX cancer.
XX Disclosure; Fig 10; 229pp; English.
XX The invention relates to the human ABC1 cholesterol transporter protein
XX (B38082) and to nucleic acid sequences (C69120) which encode it. ABC1 is
XX a member of the ATP-binding cassette (ABC transporter) superfamily of
XX proteins, and plays a crucial role in cholesterol transport, particularly
XX intracellular cholesterol trafficking in monocytes and fibroblasts, being
XX involved in cholesterol efflux from the cell. The gene encoding ABC1 is
XX located on chromosome 9q31, and mutations in this gene are associated
XX with two genetic HDL (high density lipoprotein) deficiency disorders,
XX Tangier disease (TD) and familial HDL deficiency (FHA). These diseases
XX are distinguishable in that TD is an autosomal recessive disorder, while
XX FHA is inherited as an autosomal dominant trait. Low levels of HDL ("good
XX cholesterol") in the blood correlate with a high risk of cardiovascular
XX disease, particularly coronary artery disease, but also cerebrovascular
XX disease, coronary restenosis, and peripheral vascular disease.
XX Conversely, a high level of HDL has protective effects against
XX cardiovascular disease. The invention provides genetic constructs and
XX transgenic cells and non-human animals comprising human ABC1 nucleic
XX acids, and methods of gene therapy for the treatment or prevention of
XX cardiovascular disease comprising the administration of an expression
XX vector encoding ABC1 or an active fragment thereof. The invention also
XX encompasses compounds which mimic ABC1 activity, compounds which
XX stimulate ABC1 expression and methods of screening for such compounds. It
XX further relates to methods for determining whether a patient has an
XX increased risk for cardiovascular disease due to polymorphisms in the
XX ABC1 gene. Human ABC1 proteins and nucleotides can be used to treat or
XX prevent cardiovascular disease, especially coronary artery disease,
XX cerebrovascular disease, coronary restenosis or peripheral vascular
XX disease. They may also be used in the treatment of diseases associated
XX with ABC1 biological activity, such as Alzheimer's disease, Niemann-Pick
XX disease, Huntington's disease, X-linked adrenoleukodystrophy and cancer.
XX The invention specifically excludes proteins with the exact amino acid
XX sequences of GenBank Accession No: CAA10005.1 and X75926, and the nucleic
XX acid with the exact sequence as GenBank Accession No: AJ012376.1. The
XX present sequence represents a human ABC1 gene PCR primer which may be
XX used to amplify an exon of the human ABC1 gene
XX
XX Sequence 20 BP; 3 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 2.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1070 GCTTCAGTCCCACTCC 1085
XX Db 1 GCTTAAGTCCCACTCC 16
XX
XX RESULT 248
XX AAA90791/c
XX ID AAA90791 standard; DNA; 20 BP.
XX XX
XX AC AAA90791;
```

```
XX 20-DEC-2000 (first entry)
XX Ribonucleotide reductase R1 message antisense oligo AS-I-1162-20.
XX Antisense oligonucleotide; ribonucleotide reductase; R1 protein;
XX R2 protein; tumour cell proliferation inhibition; cancer; cytostatic; ss.
XX Synthetic.
XX WO200047733-A1.
XX 17-AUG-2000.
XX 09-FEB-2000; 2000WO-CA000120.
XX 11-FEB-1999; 99US-00249730.
XX (GENE-) GENESENSE TECHNOLOGIES INC.
XX Wright JA, Young AH;
XX WPI; 2000-558216/51.
XX New antisense oligonucleotide, AS-I-618-20, is useful for inhibiting
XX tumor cell growth.
XX Example 3; Page 31; 137pp; English.
XX The present sequence is an antisense oligonucleotide directed against the
XX mRNA encoding the R1 component of mammalian ribonucleotide reductase.
XX Ribonucleotide reductase catalyses the conversion of ribonucleotides to
XX their corresponding deoxyribonucleotides and thus plays an important role
XX in DNA synthesis and cell proliferation. Regulation of ribonucleotide
XX reductase is altered in cultured malignant cells and increased levels of
XX R2 protein and R2 mRNA have been found in pre-malignant and malignant
XX tissues as compared to normal control tissue samples. The present
XX antisense sequence is therefore useful for inhibiting tumorigenicity of
XX neoplastic cells and inhibiting metastasis of tumour cells. It is also
XX useful for increasing sensitivity of neoplastic cells to chemotherapeutic
XX drugs, thus allowing chemotherapeutic treatments to be used in patients
XX who have become resistant or less sensitive to chemotherapy. The sequence
XX may be RNA or DNA and may comprise a modified backbone and/or nucleotide
XX analogues
XX
XX Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 2.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 908 TTTTCTTTGGTCTTTG 923
XX Db 18 TTTTCTTTGGTCTTTG 3
XX
XX RESULT 249
XX AAC67181/c
XX ID AAC67181 standard; DNA; 20 BP.
XX XX
XX AC AAC67181;
XX XX
XX DT 03-APR-2001 (first entry)
XX XX
XX DE Human E2F transcription factor 3 mRNA antisense sequence SEQ ID NO: 54.
XX XX
XX KW Human E2F transcription factor 3; antisense; E2F-3; cancer;
XX KW phosphorothioate backbone; infection; inflammation; PCR primer; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX FN US6165791-A.
XX XX
```

PD 26-DEC-2000.
XX
XX
XX 24-FEB-2000; 2000US-00513729.
XX
XX 24-FEB-2000; 2000US-00513729.
XX (ISIS-) ISIS PHARM INC.
XX
XX Popoff I, Wyatt J;
XX
XX WPI; 2001-101698/11.
XX
XX Novel antisense compounds targeted to E2F transcription factor 3 for
PT diagnosis, prophylaxis and treatment of diseases associated with E2F
PT transcription factor 3 such as infection, inflammation or tumor
PT formation.
XX
XX Example 15; Col 43-44; 4lpp; English.
XX
XX The present invention provides antisense oligonucleotides with
CC phosphorothioate backbones directed at the human E2F transcription factor
CC 3 (E2F-3) coding sequences. These can be used in the therapy of diseases
CC which can be treated by modulating E2F-3 expression and to prevent
CC infection, inflammation and tumour formation
XX
XX Sequence 20 BP; 2 A; 12 C; 2 G; 4 T; 0 U; 0 Other;
SQ

Query Match 0.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1021 GAGGGGGAGCTTGAAG 1036
DB 20 GAGGGGGAGCTTGGAG 5

RESULT 250
ABS54859/c
ID ABS54859 standard; DNA; 20 BP.
XX
XX
XX ABS54859;
XX
XX 04-DEC-2002 (first entry)
XX Human ankyrin 4 cDNA PCR primer #2.
XX
XX Human; ankyrin 4; primer; PCR; ss; nervous system disease.
XX
XX Homo sapiens.
XX
XX CN1293251-A.
XX
XX 02-MAY-2001.
XX
XX 18-OCT-1999; 99CN-00123133.
XX
XX 18-OCT-1999; 99CN-00123133.
XX
XX (SHEN-) SHENGYUAN GENE DEV CO LTD SHANGHAI.
XX
XX Mao Y, Xie Y;
XX
XX WPI; 2001-418931/45.
XX
XX Human ankyrin and polynucleotide sequence encoding ankyrin.
XX
XX Example 3; Page 24 (Disclosure); 37pp; Chinese.
XX
XX The invention relates to a human ankyrin 4 polypeptide and the
CC polynucleotide encoding it. The sequences are used for treating diseases
CC of the nervous system and nervous system related diseases and for
CC diagnosing the diseases relative to them by detecting a mutation in the
CC nucleic acid sequence and by monitoring the ankyrin protein level. This

CC sequence represents a PCR primer used in cloning of cDNA encoding a human
CC ankyrin 4 polypeptide
XX
XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
SQ

Query Match 0.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1141 AGCTCCACCTATACCC 1156
DB 19 AGCTTCACCTATACCC 4

RESULT 251
AAA85941/c
ID AAA85941 standard; DNA; 19 BP.
XX
XX
XX AAA85941;
XX
XX 04-DEC-2000 (first entry)
XX
XX Cdc 25 hs ribozyme binding site #49.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
XX
XX WO2000032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 100; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 0 A; 3 C; 5 G; 11 T; 0 U; 0 Other;
SQ

Query Match 0.7%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 2.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 729 CCAGGAGAAACAGACACC 747
DB 19 CCAGGAGAAACAAACACC 1

RESULT 252
AAD16173/c
ID AAD16173 standard; DNA; 19 BP.
XX
XX
XX AAD16173;

XX 19-NOV-2001 (first entry)
XX Bacterial cell identifying PCR lower primer #1.
XX Cell isolation; bacterial cell; non-specific ligand; eukaryotic parasite;
KW PCR primer; ss.
XX Bacteria.
XX WO200153525-A2.
XX 26-JUL-2001.
XX 22-JAN-2001; 2001WO-GB000240.
XX 21-JAN-2000; 2000GB-00001450.
XX (GENP-) GENPOINT AS.
XX (GARD/) GARDNER R.
XX Refseth UH, Kolpus T;
XX WPI; 2001-541431/50.
XX Isolating cells from a sample, particularly bacterial cell, comprises
PT binding the cells to a solid support by means of a non-specific ligand
PT immobilized on the solid support.
XX Example 2; Page 29; 77pp; English.
XX The present invention relates to a method for isolating cells from a
CC sample comprising binding the cells to a solid support using a non-
CC specific ligand immobilized on the solid support. The method is useful
CC for isolating a wide variety of microorganisms, specifically bacteria, in
CC a sample. The method may also be used in the isolation of eukaryotic
CC parasites, particularly those which are able to bind the complex
CC polysaccharides found on human cell, to isolate simultaneously bacteria
CC and other types of microorganism, such as algae, protozoa, fungi or
CC viruses, or to capture all types of white blood cells from a blood or
CC blood derived sample, from bone marrow or any tissue or fluid containing
CC white blood cells. The present sequence is a PCR primer which is used for
CC identification of isolated bacteria
XX
XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 2.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 937 CTCCTCATGCTTTAATGT 955
DB 19 CTCCTCATGCTTTAATGT 1
RESULT 253
AAH61103/c
ID AAH61103 standard; DNA; 19 BP.
XX AAH61103;
XX 10-SEP-2001 (first entry)
XX Cdc25 hs ribozyme binding site SEQ ID NO:3527.
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; cytoskeletal;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
OS

KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX Homo sapiens.
OS Synthetic.
XX WO200130362-A2.
XX 03-MAY-2001.
XX 26-OCT-2000; 2000WO-US029500.
XX 26-OCT-1999; 99US-0161532P.
XX (IMMU-) IMMUSOL INC.
XX Robbins JM, Tritz R;
XX WPI; 2001-300427/31.
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation. Matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX Example 1; Page 328; 408pp; English.
XX The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
XX exemplification of the present invention
XX
XX Sequence 19 BP; 0 A; 3 C; 5 G; 11 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 2.6e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 729 CCAGGAGAAACAGAACACC 747
DB 19 CCAGGAGAAACAGAACACC 1
RESULT 254
AAF70533/c
ID AAF70533 standard; DNA; 19 BP.
XX AAF70533;
XX 20-APR-2001 (first entry)
XX Human DRD2 fragment 12 PCR primer SEQ ID NO:276.
XX Human; dopamine receptor D2; DRD2; polymorphism; allele specific;
KW drug target isogene; detection; single nucleotide polymorphism; SNP;
KW genotype; schizophrenia; Parkinson's disease; myoclonus dystonia; MD;
KW probe; PCR primer; ss.
XX Homo sapiens.
OS


```
XX WO200105832-A1.
XX 25-JAN-2001.
XX
XX 19-JUL-2000; 2000WO-US019644.
XX
XX 19-JUL-1999; 99US-0144493P.
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
XX WPI; 2001-091967/10.
XX
XX Polynucleotides comprising single nucleotide polymorphisms in the human
XX dopamine receptor D2, useful for detecting mutations associated with,
XX e.g. schizophrenia, Parkinson's and myoclonus dystonia.
XX Example 1B; Page 43; 135pp; English.
XX
XX The present invention describes polynucleotides comprising single
XX nucleotide polymorphisms (SNPs) in the human dopamine receptor D2 (DRD2).
XX The polynucleotides may be used in assays to detect and characterise
XX polymorphisms in DRD2 that affect its expression and activity and are
XX involved in disorders such as schizophrenia, Parkinson's and myoclonus
XX dystonia (MD). This information would be useful for studying the
XX biological function of DRD2 as well as in identifying drugs targeting
XX this protein for the treatment of disorders related to its abnormal
XX expression or function. Polymorphisms in the DRD2 gene affect the
XX expression of active and functional polypeptides. Therefore it is
XX advantageous to detect polymorphisms in the DRD2 gene and how those
XX polymorphisms are combined in different copies of the gene. AAF70261 to
XX AAF70308 represent human DRD2 allele specific oligonucleotide probes, and
XX AAF70309 to AAF70404 represent human DRD2 allele specific oligonucleotide
XX primers which are used in the detection of DRD2 polymorphisms. AAF70405
XX to AAF70452 represent oligonucleotide primers for the detection of human
XX DRD2 polymorphisms which are given in the exemplification of the present
XX invention. AAF70453 to AAF70538 represent PCR primers for the human DRD2
XX gene which are used in examples from the present invention.
XX Sequence 19 BP; 5 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 2.6e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 1128 CACCTTCACCTCCAGCTCC 1146
XX Db 19 CATCTCCATCTCCAGCTCC 1
XX
XX RESULT 255
XX AAD27475/C
XX ID AAD27475 standard; DNA; 19 BP.
XX
XX AC AAD27475;
XX
XX 18-APR-2002 (first entry)
XX
XX Human TREK-2 gene exon-intron 1-exon DNA.
XX
XX Human; TWIK-Related K+ Channel-2; TREK-2; anaesthetic; screening; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX FT exon 1..2
XX FT exon /*tag= a
XX FT intron 3..17
XX FT /*tag= b
XX FT /number= 1
XX FT exon 18..19
```

```
FT /*tag= c
XX WO200200715-A2.
XX
XX 03-JAN-2002.
XX
XX 27-JUN-2001; 2001WO-IB001436.
XX
XX 27-JUN-2000; 2000US-0214559P.
XX 27-JUN-2001; 2001US-00892360.
XX (CNRS ) CNRS CENT NAT RECH SCI.
XX
XX Lazdunski M, Lesage F, Romey G;
XX WPI; 2002-139903/18.
XX
XX New mammalian K+ channel protein with two pore domains, for screening
XX various compounds, particularly for identifying biologically active
XX compounds with anaesthetic properties.
XX
XX Disclosure; Fig 1B; 50pp; English.
XX
XX The invention relates to a mammalian K+ channel protein with two pore
XX domains, called TREK2 (TWIK-Related K+ Channel). The protein produces
XX currents whose current-voltage relationship is slightly inwardly
XX rectifying in high symmetrical K+ conditions. TREK2 is a member of the
XX fatty acid-activated and mechanosensitive K+ channel family. TREK-2 gene
XX located on chromosome 14q31 is abundantly expressed in kidney, pancreas
XX and moderately in testis, brain, colon and small intestine. The mammalian
XX K+ channel protein is useful in methods for screening various compounds.
XX In particular, the protein is useful in methods for identifying
XX biologically active compounds with anaesthetic properties. The present
XX sequence is reverse transcription (RT) PCR primer used for analysing
XX human TREK-2 gene exon-intron-exon DNA sequence used in the invention
XX
XX Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 2.6e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 867 CACTGAGGACTCAGGCACC 885
XX Db 19 CACTGAGGAGTCAGGCTCC 1
XX
XX RESULT 256
XX AAV11921/C
XX ID AAV11921 standard; DNA; 20 BP.
XX
XX AC AAV11921;
XX
XX 13-AUG-1998 (first entry)
XX
XX Hepatocyte growth factor inhibiting oligonucleotide #13.
XX
XX Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;
XX antitumour agent; anti-metastasis agent; primer; ss.
XX
XX Synthetic.
XX
XX OS
XX JP10127286-A.
XX
XX PD 19-MAY-1998.
XX
XX 01-NOV-1996; 96JP-00291499.
XX
XX 01-NOV-1996; 96JP-00291499.
XX (TERU ) TERUMO CORP.
XX
XX WPI; 1998-340665/30.
```

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XX Oligo:nucleotide inhibiting HGF production - useful as antitumour and
PT anti-metastatic agent.
XX Claim 8; Page 10; 15pp; Japanese.
XX AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used
CC to identify sequences which modulate or inhibit expression, production or
CC reception of hepatocyte growth factor (HGF) or expression of c-Met. Such
CC oligonucleotides are useful as antitumour or anti-metastasis agents
XX
SQ Sequence 20 BP; 9 A; 0 C; 11 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTATCCCTCCCTTC 942
DB 19 CCTTTCTCCTCCCTTC 1

RESULT 257
AAV11923
ID AAV11923 standard; DNA; 20 BP.
XX AC
XX AC
XX AAV11923;
XX 13-AUG-1998 (first entry)
XX Hepatocyte growth factor inhibiting oligonucleotide #15.
XX Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;
KW antitumour agent; anti-metastasis agent; primer; ss.
XX Synthetic.
XX JP10127286-A.
XX 19-MAY-1998.
XX 01-NOV-1996; 96JP-00291499.
XX 01-NOV-1996; 96JP-00291499.
XX (TERU ) TERUMO CORP.
XX WPI; 1998-340665/30.
XX Oligo:nucleotide inhibiting HGF production - useful as antitumour and
PT anti-metastatic agent.
XX Claim 8; Page 10; 15pp; Japanese.
XX AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used
CC to identify sequences which modulate or inhibit expression, production or
CC reception of hepatocyte growth factor (HGF) or expression of c-Met. Such
CC oligonucleotides are useful as antitumour or anti-metastasis agents
XX
SQ Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;

Query Match      0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTATCCCTCCCTTC 942
DB 2 CCTTTCTCCTCCCTTC 20

RESULT 258
AAZ19995
ID AAZ19995 standard; DNA; 20 BP.

```

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XX AAZ19995;
XX 21-DEC-1999 (first entry)
XX Human uncoupling protein 2 gene primer 2565r.
XX Uncoupling protein 2; UCP2; human; obesity; diabetes; diagnosis;
KW gene therapy; PCR; primer; ss.
XX Synthetic.
XX Homo sapiens.
XX WO9948905-A1.
XX 30-SEP-1999.
XX 23-MAR-1999; 99WO-US006317.
XX 23-MAR-1998; 98US-0078972P.
XX (MUSC-) MUSC FOUND RES DEV.
XX Garvey WT, Argyropoulos G;
XX WPI; 1999-591072/50.
XX Use of uncoupled protein 2 or 3 as markers for identifying subjects at
PT risk of developing obesity or diabetes.
XX Example 3; Page 72; 112pp; English.
XX This is the nucleotide sequence of a primer termed 2565r. A set of
CC primers (see AAZ19971-73 and AAZ19977-95) including 2565r was used in the
CC PCR amplification and sequencing of genomic fragments of the human
CC uncoupling protein 2 (UCP2) gene (see AAZ19967). The invention provides a
CC method for identifying a subject having a risk of developing obesity
CC and/or type II diabetes mellitus by detecting the presence of a single
CC nucleotide polymorphism in UCP2 or UCP3 nucleic acid (see AAZ19967-70)
XX
SQ Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match      0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 853 GAGATGTTAAGGCACTG 871
DB 1 GAGCATGTAAGGCACAG 19

RESULT 259
AAZ96519/c
ID AAZ96519 standard; DNA; 20 BP.
XX AC
XX AAZ96519;
XX 13-SEP-1999 (first entry)
XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX Synthetic.
XX Chlamydia pneumoniae.
XX WO9927105-A2.
XX 03-JUN-1999.
XX 20-NOV-1998; 98WO-IB001890.

```


Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 983 CCAACGGTGGAAAGTCAAG 981
DB 1 CGAACGGTAGAAATCAAG 19

RESULT 262
AAZ97571/c
ID AAZ97571 standard; DNA; 20 BP.
XX AC AAZ97571;
XX 15-SEP-2003 (revised)
DT 26-APR-2000 (first entry)
XX XX
DE HIV-1 protease gene probe SEQ ID NO:61.

XX Human immunodeficiency virus; HIV; protease; probe; detection;
KW drug selected mutation; hybridisation; genotyping; infection;
KW drug resistance; ss.

XX Human immunodeficiency virus 1.
OS WO9967428-A2.
XX 29-DEC-1999.

XX 22-JUN-1999; 99WO-EP004317.
XX 24-JUN-1998; 98EP-00870143.
XX (INNO-) INNOGENETICS NV.
PA Stuyver L;

PI WPI; 2000-147219/13.

DR

XX Detection of drug-selected mutations in the HIV protease gene used to

PT treat HIV infections.

PS Claim 3; Page 33; 76pp; English.

XX The present invention describes the detection of drug-selected mutations
CC in the HIV protease gene. The method of detection allows the simultaneous
CC characterisation of a range of codons involved in drug resistance using
CC sets of probes optimised to function together in a reverse-hybridisation
CC assay. AAZ97517 to AAZ97997 represent specifically claimed probes for use
CC in the assay, and AAZ97479 to AAZ97501 represent specifically claimed HIV
CC protease gene polymorphic nucleotide sequences. AAZ97502 to AAZ97515, and
CC AAZ98004 to AAZ98007, represent PCR primers for the HIV protease gene,
CC and AAZ97516 represents an HIV protease probe used in an example from the
CC present invention. The method, probes and primers can be used for the
CC detection of drug-selected mutations in the HIV protease gene. The method
CC allows the simultaneous characterisation of a range of codons involved in
CC drug resistance. The method may also be used for HIV protease genotyping
CC assays. The probes are able to discriminate between wild type and mutated
CC protease sequences. The method allows rapid and reliable detection of
CC drug-selected mutation in HIV. (Updated on 15-SEP-2003 to standardise OS
CC field)

SQ Sequence 20 BP; 5 A; 0 C; 11 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1134 CACCTCCAGTCCACCTAT 1152
DB 19 CACCTCCAAATCCCTAT 1

RESULT 263
AAZ72760/c
ID AAZ72760 standard; DNA; 20 BP.
XX AC AAZ72760;
XX 10-SEP-2001 (first entry)

XX Human biallelic marker upstream amplification primer SEQ ID NO:7116.
DE Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.

XX Homo sapiens.

XX WO9954500-A2.

XX 28-OCT-1999.

XX 21-APR-1999; 99WO-IB000822.

XX 21-APR-1998; 98US-0082614P.

XX 23-NOV-1998; 98US-0109732P.

XX (GEST) GENSET.

XX Cohen D, Blumenfeld M, Chumakov I;

XX WPI; 2000-013267/01.

XX Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.

XX Claim 9; Page 1748; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. the SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention

SQ Sequence 20 BP; 4 A; 9 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 848 AGATTGGAATGTTAAGGG 866
DB 19 AAATTGGAATGTTAGGG 1

RESULT 264
AAH49172/c
ID AAH49172 standard; DNA; 20 BP.

XX AAH49172;

XX 26-NOV-2001 (first entry)

XX DE Human procalcitonin pCT PCR primer 1099.
 XX DE Procalcitonin; pCT; antitumor; antiinflammatory; tumor;
 KW sepsis; systemic inflammatory response syndrome; PCR primer; ss.
 XX OS Homo sapiens.
 XX PN EP1111050-A2.
 XX PN 27-JUN-2001.
 XX PF 24-NOV-2000; 2000EP-00125719.
 XX PR 22-DEC-1999; 99DE-01062434.
 XX PR 03-APR-2000; 2000DE-01016278.
 XX PR 08-JUN-2000; 2000DE-01027954.
 XX (DADE-) DADE BEHRING MARBURG GMBH.
 XX Althaus H, Hauser HP;
 XX WPI; 2001-572431/65.
 XX New, preferably recombinant, human procalcitonin, useful for diagnosis
 PT and treatment of sepsis, tumors and systemic inflammatory response
 PT syndrome.
 XX Example 1; Page 22; 36pp; German.
 CC This invention describes novel isolated, preferably recombinant,
 CC polypeptides (I) containing the amino acid sequence for human
 CC procalcitonin (hPCT). The products of the invention have antitumor,
 CC anticarcinoma and antiinflammatory activity. (I) (also antibodies (Ab),
 CC raised against it) are used: (i) for diagnosis and treatment of tumors,
 CC sepsis and systemic inflammatory response syndrome; (ii) to raise Ab;
 CC (iii) for quantitative or qualitative detection and analysis, especially
 CC of hPCT and antibodies against it; (iv) as controls or standards for
 CC assays; and (v) for affinity chromatography. Isolated (I) can be produced
 CC inexpensively in large amounts by recombinant expression. Solutions of
 CC (I) that contain a polyethoxylated sterol ester have good storage
 CC stability. This sequence represents a PCR primer used in the
 CC amplification of human procalcitonin pCT
 XX
 SQ Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1057 GCCCAACCCCAAGCTTCA 1075
 Db 20 GCCCAGATCTAGCTTCA 2
 RESULT 265
 AAD21385/c
 ID AAD21385 standard; DNA; 20 BP.
 AC AAD21385;
 XX
 DT 28-JAN-2002 (first entry)
 XX Antisense oligo, HYB 964, directed against human XPA gene.
 DE
 DE Human; cytotoxin; cancer; transcription coupled repair; TCR;
 KW nucleotide excision repair; NER; antisense; cytosstatic;
 KW Xeroderma pigmentosum group A; XPA; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers

FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 XX WO200174346-A2.
 XX 11-OCT-2001.
 XX 03-APR-2001; 2001WO-US010800.
 XX 03-APR-2000; 2000US-0194343P.
 XX (HYBR-) HYBRIDON INC.
 XX Agrawal S, Kandimalla ER, Bregman DB, Mani S, Lu Y;
 XX WPI; 2001-662947/76.
 XX Increasing sensitivity of cancer cells to a cytotoxin or oxidizing agent
 PT useful for therapy comprises contacting them with oligonucleotides
 PT complementary to transcription coupled repair or nucleotide excision
 PT repair genes.
 XX Claim 15; Page 18; 58pp; English.
 CC The present invention relates to a method for potentiating or enhancing
 CC the toxic effect of a cytotoxin or oxidising agent on a cancer cell,
 CC comprising contacting the cell with an oligonucleotide complementary to a
 CC gene involved in transcription coupled repair (TCR) and nucleotide
 CC excision repair (NER) and with a cytotoxin or oxidising agent. The
 CC invention is used to sensitize cancer cells to therapeutic agents. The
 CC present sequence is an antisense oligonucleotide directed against
 CC Xeroderma pigmentosum group A (XPA) gene
 XX
 SQ Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 3e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1268 TTCAGAGTGGGAGGACAG 1286
 Db 19 TGCAGAGTGGTAGGTCTAG 1
 RESULT 266
 ABK30573/c
 ID ABK30573 standard; DNA; 20 BP.
 XX AC ABK30573;
 XX
 DT 23-APR-2002 (first entry)
 XX Human glioma-associated oncogene-1 antisense oligonucleotide ISIS 124905.
 DE
 DE Human; glioma-associated oncogene-1 associated disease; infection;
 KW inflammation; tumour formation; cytosstatic; antiinflammatory; antisense;
 KW phosphorothioate; ss.
 XX Homo sapiens.
 OS
 XX US6329203-B1.
 XX 11-DEC-2001.
 XX 08-SEP-2000; 2000US-00657042.
 XX 08-SEP-2000; 2000US-00657042.
 XX (ISIS-) ISIS PHARM INC.
 XX Bennett CF, Wyatt J;

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XX DR WPI; 2002-138363/18.
XX
XX PT Novel antisense compounds targeted to nucleic acids encoding glioma-
XX PT associated oncogene-1, for modulating the gene expression and treating
XX PT diseases associated with expression of the oncogene in humans.
XX
XX PS Example 15; Col 45-46; 43pp; English.
XX
XX CC The present invention relates to antisense compounds and methods for
XX CC modulating the expression of human glioma-associated oncogene-1. The
XX CC antisense compounds, particularly antisense oligonucleotides, target and
XX CC inhibit the expression of human glioma-associated oncogene-1. The
XX CC antisense compounds are useful for inhibiting the expression of human
XX CC glioma-associated oncogene-1 in human cells or tissues and for treating
XX CC an animal, particularly a human suspected of having or being prone to a
XX CC disease or condition associated with expression of glioma-associated
XX CC oncogene-1. The compounds are useful for diagnostics, therapeutics and as
XX CC research reagent, e.g. prophylactically to prevent or delay infection,
XX CC inflammation or tumor formation. The antisense compounds are safely and
XX CC effectively administered to humans. ABK30509-ABK30586 represent the
XX CC antisense oligonucleotides of the invention which comprise a
XX CC phosphorothioate backbone
XX
XX SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 1012 CCTGAAAGAGGGGGAGC 1030
XX Db 19 CCAGAAAAATTGGGGGAGC 1
XX
XX RESULT 267
XX AAD37207
XX ID AAD37207 standard; DNA; 20 BP.
XX AC AAD37207;
XX
XX DT 21-AUG-2002 (first entry)
XX
XX DE Human MEK4 antisense oligonucleotide, ISIS #123142.
XX
XX KW Human; MEK4 modulation; mitogen-activated protein kinase kinase 4; WTK1;
XX KW MAP3K4; MAP three kinase 1; MAP/ERK kinase kinase 4; MAPKKK4; cytotatic;
XX KW prophylaxis; immunological; hyperproliferative disorder; cancer; therapy;
XX KW antisense; inflammatory; phosphorothioate backbone; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX FT modified_base 1..5
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl nucleotides"
XX FT modified_base 10
XX FT /*tag= d
XX FT /mod_base= m5c
XX FT modified_base 11
XX FT /*tag= e
XX FT /mod_base= m5c
XX FT modified_base 13
XX FT /*tag= f
XX FT /mod_base= m5c
XX FT modified_base 16..20
XX FT /*tag= c

```

```

FT FT /mod_base= OTHER
FT FT /note= "2'-methoxyethyl nucleotides"
FT FT 18
FT FT /*tag= g
FT FT /mod_base= m5c
FT FT modified_base 19
FT FT /*tag= h
FT FT /mod_base= m5c
XX
XX WO200227033-A1.
XX
XX PD 04-APR-2002.
XX
XX PF 28-SEP-2001; 2001WO-US030549.
XX
XX PR 29-SEP-2000; 2000US-00676436.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Ward DT, Gaarde WA, Monia BP, Wyatt JR;
XX
XX WPI; 2002-416486/44.
XX
XX New antisense compound targeted to nucleic acid encoding mitogen-
XX PT activated protein kinase 4, useful for treating immunologic disorder,
XX PT inflammatory disorder or cancer.
XX
XX FS Claim 3; Page 93; 132pp; English.
XX
XX CC The present invention relates to antisense compounds, compositions and
XX CC methods for modulating the expression of MEK4 (also referred as mitogen-
XX CC activated protein kinase kinase 4; MAP3K4; MAP three kinase 1; MAP/ERK
XX CC kinase kinase 4; MAPKKK4; WTK1). The antisense oligos are useful for
XX CC inhibiting the expression of MEK4 in cells or tissues. They are also
XX CC useful for treating an animal having a disease or condition associated
XX CC with MEK4 such as immunological, inflammatory, hyperproliferative
XX CC disorder or cancer. Sequences of the invention are also useful for
XX CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX CC They are also useful in antisense therapy. The present sequence is an
XX CC antisense oligonucleotide targeted to human MEK4 DNA. This sequence is
XX CC used in the exemplification of the invention
XX
XX SQ Sequence 20 BP; 2 A; 5 C; 2 G; 11 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 907 ATTTCTTTGTCCTTTGCC 925
XX Db 1 ATTTGTTTCCTTTTGCC 19
XX
XX RESULT 268
XX ABV73834
XX ID ABV73834 standard; DNA; 20 BP.
XX
XX AC ABV73834;
XX
XX DT 08-JAN-2003 (first entry)
XX
XX DE Phosphorothioate oligonucleotide for AIDS therapy.
XX
XX KW Phosphorothioate; HIV-1; azasugar; AIDS; virucide; antiviral; anti-HIV;
XX KW therapy; ss.
XX
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkage"

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```

FT modified_base 1 /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "azasugar-containing adenosine derivative"
FT modified_base 7
FT FT /mod_base= OTHER
FT FT /note= "azasugar-containing adenosine derivative"
FT modified_base 13
FT FT /*tag= d
FT FT /mod_base= OTHER
FT FT /note= "azasugar-containing adenosine derivative"
FT modified_base 19
FT FT /*tag= e
FT FT /mod_base= OTHER
FT FT /note= "azasugar-containing adenosine derivative"
XX
XX W0200268582-A2.
XX
XX 06-SEP-2002.
XX
XX 27-FEB-2002; 2002WO-KR000325.
XX
XX 27-FEB-2001; 2001KR-00009914.
XX
XX (DONG-) DONGBU HANNONG CHEM CO LTD.
XX
XX Bae Y, Lee D, Lim H, Kim S, Lee K, Jung K;
XX WPI; 2002-750412/81.
XX
XX New phosphorothioate oligonucleotides useful in the treatment of AIDS.
XX Claim 3; Page 41; 120pp; English.
XX
XX The present sequence is that of a phosphorothioate oligonucleotide of
XX random sequence which includes 4 six-membered azasugar nucleotide
XX derivatives. It is a claimed example of oligonucleotides of the invention
XX (see ABV73816-41) that have been tested as AIDS therapeutic agents. In
XX anti-HIV-1 assays, the oligonucleotide showed higher antiviral activity
XX than AZT, ddC and ddI, and antiviral activity was resistant to the
XX effects of serum. Claimed oligonucleotides of the present invention have
XX low toxicity against cells, are membrane permeable, working outside of
XX cells to inhibit viral attachment of HIV, have a wide antiviral activity
XX against a broad spectrum of HIV variants, are not active against other
XX viruses including HIV. The resistance of the present oligonucleotide to
XX serum allows its use as an AIDS therapeutic drug in vivo
XX
XX Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1129 ACCTTCACCTCCAGCTCCA 1147
XX |||||
XX Db 1 AGCTCCAGCTCCAGCTCCA 19
XX
XX RESULT 269
XX ABZ91126
XX ID ABZ91126 standard; DNA; 20 BP.
XX
XX AC ABZ91126;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

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KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX Homo sapiens.
XX W0200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX Disclosure; SEQ ID NO 6368; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 20;
XX Best Local Similarity 84.2%; Pred. No. 3e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 883 ACCACAGTGTGTGGCCCC 901
XX |||||
XX Db 2 ACCCCAGTGTGTGGCCCC 20
XX
XX RESULT 270
XX ABZ89089/c
XX ID ABZ89089 standard; DNA; 20 BP.
XX
XX AC ABZ89089;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

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KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX Homo sapiens.
OS WO200285308-A2.
PN 31-OCT-2002.
XX 23-APR-2002; 2002WO-US013135.
XX 24-APR-2001; 2001US-0286137P.
XX (EPIC-) EPIGENESIS PHARM INC.
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX Disclosure; SEQ ID NO 4331; 872pp; English.
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 20 BP; 3 A; 2 C; 10 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1051 CCCCTGGCCGACCAACCCAA 1069
DB 19 CCCTTGACCCGACCCAA 1
RESULT 271
ABZ77254
ID ABZ77254 standard; DNA; 20 BP.
XX ABZ77254;
XX 28-MAY-2003 (first entry)
DE Antisense oligonucleotide for C-reactive protein coding region.
XX Antisense oligonucleotide; C-reactive protein; phosphorothioate;
KW cardiovascular disease; unstable angina; myocardial infarction; ss.
XX Synthetic.

OS Homo sapiens.
XX WO2003010284-A2.
XX 06-FEB-2003.
XX 15-JUL-2002; 2002WO-US022656.
XX 25-JUL-2001; 2001US-00912724.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2003-239435/23.
XX New antisense oligonucleotides, useful for modulating the expression of C
PT -reactive protein or for treating a disease or condition associated with
PT the expression of C-reactive protein, e.g. unstable angina or myocardial
PT infarction.
XX Claim 3; Page 93; 113pp; English.
XX The specification describes antisense oligonucleotides which are
CC targeting to DNA encoding C-reactive protein. The antisense compounds are
CC useful for modulating the expression of C-reactive protein, and for
CC treating a disease or condition associated with expression of C-reactive
CC protein, e.g. cardiovascular disease, such as unstable angina or
CC myocardial infarction. ABZ77222-75 represent antisense oligonucleotides
CC of the invention, directed against human C-reactive protein gene
XX
XX SQ Sequence 20 BP; 1 A; 9 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1091 TCACCCCCACCCCTGGGCTT 1109
DB 2 TCTTCCTCACCCCTGGGCTT 20
RESULT 272
AAD56960
ID AAD56960 standard; DNA; 20 BP.
XX AAD56960;
XX 06-NOV-2003 (first entry)
XX Human mucin 1 transmembrane antisense oligonucleotide ISIS #199401.
XX Human; mucin 1 transmembrane; hyperproliferative disorder; cytostatic;
KW inflammatory disorder; gene therapy; H23-E7A transmembrane antigen;
KW antisense; episialin; epitectin; polymorphic epithelial mucin; CD227;
KW peanut-reactive urinary mucin; PUM; epithelial membrane antigen; EMA;
KW PEM; NCR11; H23 antigen; DF3 antigen; phosphorothioate backbone; MUC1;
KW PAS-0; ss.
XX Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methyl cytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethoxy (2'-MOE) nucleotides"
FT modified_base 16..20


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FT FT /*tag= c
FT FT /mod_base= OTHER
XX XX /note= "2'-methoxyethoxy (2'-MOE) nucleotides"
PN PN WO2003054154-A2.
XX XX
PD PD 03-JUL-2003.
XX XX
XX XX 13-DEC-2002; 2002WO-US039873.
XX XX
XX XX 20-DEC-2001; 2001US-00029517.
XX XX
XX XX (ISIS-) ISIS PHARM INC.
XX XX
XX XX Dobie KW, Myers SJ;
XX XX
XX XX WPI; 2003-559135/52.
XX XX
XX XX New compound, having a sequence targeted to a nucleic acid encoding mucin
PT PT 1, transmembrane, useful for preparing a composition for treating
PT PT hyperproliferative or inflammatory disorders.
XX XX
XX XX Claim 3; Page 81; 132pp; English.
XX XX
XX XX The present invention relates to antisense oligonucleotides targeted to
CC CC a nucleic acid encoding mucin 1 transmembrane (also known as MUC1,
CC CC episialin, epitectin, polymorphic epithelial mucin; PEM, peanut-reactive
CC CC urinary mucin; PUM, epithelial membrane antigen; EMA, PAS-0, NCRC11, H23
CC CC antigen, H23-ETA transmembrane antigen, DF3 antigen and CD27) to
CC CC inhibit/modulate the expression of mucin 1 transmembrane. Antisense
CC CC compounds of the invention are useful for preparing compositions for
CC CC treating hyperproliferative or inflammatory disorders. The invention is
CC CC also used in gene therapy. The present sequence is human mucin 1
CC CC transmembrane antisense oligonucleotide
XX XX
SQ Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX XX
QY 797 CCTGTAGTAACTGTAGAA 815
Db 2 CCTGTAACTGTAGCA 20
XX XX
RESULT 273
AAL60009/c
XX ID AAL60009 standard; DNA; 20 BP.
XX AC AAL60009;
XX DT 27-AUG-2003 (first entry)
XX DE Human GH-1 gene amplifying PCR primer, CRVL56.1tl.
XX XX
XX KW Human; growth hormone 1; GH-1; single nucleotide polymorphism; SNP;
XX KW gene therapy; PCR; primer; ss.
XX OS Homo sapiens.
XX XX
XX PN WO2003042226-A2.
XX PD 22-MAY-2003.
XX XX
XX PF 07-NOV-2002; 2002WO-US035719.
XX XX
XX PR 09-NOV-2001; 2001US-0347448P.
XX XX
XX PA (PHAA ) PHARMACIA & UPJOHN CO.
XX XX
XX PI Wood LS, Wagner S, Parodi LA;
XX XX
WPI; 2003-449555/42.
XX XX
PT New growth hormone 1 (GH-1) diagnostic polynucleotide, useful as markers
PT for the analysis of a disease, or of susceptibility to drug treatment for
XX XX GH-1 dysfunction or other diseases.
XX XX
PS Example 2; Page 30; 74pp; English.
XX XX
XX XX The invention relates to growth hormone 1 (GH-1) gene including single
CC CC nucleotide polymorphisms (SNP). The GH-1 diagnostic polynucleotide is
CC CC useful as markers for the analysis of a disease, of susceptibility to
CC CC drug treatment for GH-1 dysfunction or other diseases, or may be included
CC CC in any complete or partial genetic map of the human genome. GH-1 mutant
CC CC polypeptides are useful as antagonists of GH-1 hormone action.
CC CC Polynucleotides encoding these polypeptides are useful in gene therapy.
CC CC The present sequence is a PCR primer used for amplifying human GH-1 gene
XX XX
SQ Sequence 20 BP; 2 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX XX
QY 1011 ACCTGAAAAGAGGGGGAG 1029
Db 19 ATCTGAAAGGAGGAGAG 1
XX XX
RESULT 274
ABT34958/c
XX ID ABT34958 standard; DNA; 17 BP.
XX AC ABT34958;
XX DT 12-JUN-2003 (first entry)
XX DE Tumour suppression related human fukutin oligo SEQ ID No 595.
XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.
XX OS Homo sapiens.
XX XX
XX PN WO2003025175-A2.
XX PD 27-MAR-2003.
XX PF 17-SEP-2002; 2002WO-IB004208.
XX PR 17-SEP-2001; 2001FR-00011978.
XX XX
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX XX
XX PI Telerman A, Amson R, Tuijnder M;
XX XX
XX WPI; 2003-313353/30.
XX XX
XX XX New isolated nucleic acid, useful for treating viral diseases associated
PT PT with tumors and cell degeneration, also related polypeptides, antibodies
PT PT and transfected cells.
XX XX
XX PS Disclosure; Page 103; 720pp; French.
XX XX
XX XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC CC given in the specification, a sequence containing at least 15 consecutive
CC CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC CC hybridizes to them under highly stringent conditions, or the complement
CC CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC CC acids of the invention are useful as probes and primers for detecting,
CC CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one

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CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 2 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 14; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 2e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1270 CAGAAAGTGGGAGGA 1283
 Db 16 CAGAAAGTGGGAGGA 3
 |||||

RESULT 275
 AAV14110/c
 ID AAV14110 standard; DNA; 18 BP.

XX AC AAV14110;

DT 27-AUG-2003 (revised)
 DT 19-MAY-1998 (first entry)

DE Probe HBPr276 for RT pol region of HBV.

XX Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
 KW preCore region; HBsAg region; genotype specific target;
 KW mutation detection; ss.

OS Synthetic.
 OS Hepatitis B virus.

XX WO9740193-A2.

XX 30-OCT-1997.

XX 21-APR-1997; 97WO-EP002002.

XX 19-APR-1996; 96EP-00870053.

XX (INNO-) INNOGENETICS NV.

XX Stuyver L, Rossau R, Maertens G;

XX WPI; 1997-535867/49.

XX Detection and/or genetic analysis of hepatitis B virus - specifically
 PT genotype, preCore mutations, vaccine escape mutations and RT gene
 PT mutations selected by treatment with drugs.

XX Claim 5; Fig 1; 80pp; English.

XX This sequence represents a probe for the RT pol region of hepatitis b
 CC virus (HBV). This sequence can be used in the method of the invention for
 CC detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.
 CC The method comprises: (a) optionally releasing, isolating or
 CC concentrating polynucleic acids (I) in the sample, and amplifying the
 CC relevant part of a suitable HBV gene in the sample with at least 1
 CC suitable primer pair; (b) hybridising (I) with a combination of at least
 CC 2 nucleotide probes, which are applied to known locations on a solid
 CC support and hybridise specifically to mutant target sequences chosen from

CC the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV
 CC genotype specific target sequences, or their complements or U for T
 CC homologues; (c) detecting the hybrids formed in step (b), and inferring
 CC the HBV genotype and/or mutants present in the sample from the
 CC differential hybridisation signal(s). The composition can be used to
 CC diagnose and/or monitor HBV mutants and/or genotypes in a sample.
 CC Specifically genotype, preCore mutations, vaccine escape mutations and RT
 CC gene mutations selected by treatment with drugs, e.g. lamivudine and
 CC penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX SQ Sequence 18 BP; 1 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 14; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 728 GCCAGGAGAAACAG 741
 Db 18 GCCAGGAGAAACAG 5
 |||||

RESULT 276
 AAT84911
 ID AAT84911 standard; cDNA; 20 BP.

XX AC AAT84911;

XX 30-MAR-1998 (first entry)

DE Human Werner's syndrome WP-2 gene 5'-end PCR primer SP-2.

XX Werner's syndrome; WP-2; sterility; reproductive system; detection;
 KW diagnostic; pharmaceutical; PCR primer; ss.

OS Synthetic.

OS Homo sapiens.

XX JP09206080-A.

XX 12-AUG-1997.

XX 31-JAN-1996; 96JP-00016236.

XX 31-JAN-1996; 96JP-00016236.

XX (EIJU-) EIJIN KENKYUSHO KK.

XX WPI; 1997-460746/43.

XX Werner's syndrome causing gene WS-2 - useful to detect diseases causing
 PT sterility and create novel sterility treating pharmaceutical
 PT preparations.

XX Disclosure; Page 24; 29pp; Japanese.

XX PCR primers AAT84900-T84918 are used in the amplification of a novel
 CC Werner's syndrome gene, WS-2, which is involved in the reproductive
 CC system. This gene can be used to detect diseases causing sterility and
 CC create novel sterility treating pharmaceutical preparations. It can also
 CC be used to elucidate the onset of Werner's syndrome and its genetic
 CC expression and regulation. Probes designed from this gene can be used to
 CC examine and prevent diseases related to Werner's syndrome. The protein
 CC encoded by the gene can be used study human ontogeny

XX SQ Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 14; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 3.4e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1083 TCCAGGCTTCACCC 1096
 Db 4 TCCAGGCTTCACCC 17
 |||||

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RESULT 277
ABK89166
ID ABK89166 standard; DNA; 20 BP.
XX AC ABK89166;
XX DT 21-OCT-2002 (first entry)
XX DE Human JAZF1 PCR primer 7SenseInner.
XX KW Human; JAZF1; juxtaposed with another zinc finger; jJAZ1; JAZF1/jJAZ1;
XX KW joined with JAZF1; proliferation; endometrial stroma tumour; immunogen;
XX KW antigen; antibody; fertility; pregnancy; gene therapy; vaccine; PCR;
XX KW primer; ss.
XX OS Homo sapiens.
XX PN WO200193805-A2.
XX PD 13-DEC-2001.
XX EF 04-JUN-2001; 2001WO-US017936.
XX FR 02-JUN-2000; 2000US-0209093P.
XX PA (BGHM ) BRIGHAM & WOMENS HOSPITAL INC.
XX PI Koontz J, Sklar J;
XX DR WPI; 2002-575047/61.
XX PT Novel JAZF1, jJAZ1 or JAZF1/jJAZ1 polypeptides useful as immunogens or
XX PT antigens to raise or test anti-JAZF1, jJAZ1 or JAZF1/jJAZ1 antibodies.
XX PS Example 8; Page 58; 76pp; English.
XX CC The present invention relates to a new JAZF1 (juxtaposed with another
XX CC zinc finger), jJAZ1 (joined with JAZF1) or JAZF1/jJAZ1 polypeptide. The
XX CC methods of the invention can be used to identify a compound which
XX CC controls proliferation of endometrial stroma, by expressing jJAZ1 in the
XX CC presence of the compound, and determining whether the compound affects
XX CC expression of jJAZ. JAZF1, jJAZ1 or JAZF1/jJAZ1 polypeptides are useful
XX CC as immunogens or antigens to raise or test anti-JAZF1, jJAZ1 or
XX CC JAZF1/jJAZ1 antibodies. The invention can be used as bait proteins in a
XX CC two hybrid assay or three hybrid assay to identify other proteins which
XX CC bind or interact with JAZF1/jJAZ1-binding proteins. JAZF1, jJAZ1 or
XX CC JAZF1/jJAZ1 molecules are useful for identifying the origin of tumour and
XX CC as tumour marker protein to verify that a stromal tumour is from
XX CC endometrium. The antibody is useful for promoting or decreasing fertility
XX CC or pregnancy, and also for treating endometrial stromal tumours. The
XX CC present nucleic acid sequence represents a PCR primer that was used in
XX CC the methods of the invention for amplification of the human JAZF1 gene
XX CC located on chromosome 7
XX SQ Sequence 20 BP; 3 A; 10 C; 0 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 932 CCCCTCCTTCATT 945
Db 7 CCCCTCCTTCATT 20
RESULT 278
AAV97281/c
ID AAV97281 standard; RNA; 17 BP.
XX AC AAV97281;
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
XX KW ophthalmologic; antiinflammatory; antiarthritic; antiposrotic; ARMD;
XX KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX KW age related macular degeneration; inflammation; neovascular glaucoma;
XX KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX KW tuberculous sclerosis; pot-wine stain; Sturge Weber syndrome;
XX SQ Sequence 17 BP; 3 A; 7 C; 2 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 860 TTAAGGGCACTGAGGAC 876
Db 17 TTGAGGGCAATGAGGAC 1
RESULT 279
AAZ23120
ID AAZ23120 standard; RNA; 17 BP.
XX AC AAZ23120;
XX DT 19-JUN-2000 (first entry)
XX DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6346.
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
XX KW ophthalmologic; antiinflammatory; antiarthritic; antiposrotic; ARMD;
XX KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX KW age related macular degeneration; inflammation; neovascular glaucoma;
XX KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX KW tuberculous sclerosis; pot-wine stain; Sturge Weber syndrome;
XX SQ Sequence 17 BP; 3 A; 7 C; 2 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 860 TTAAGGGCACTGAGGAC 876
Db 17 TTGAGGGCAATGAGGAC 1

```


DE Human CD20 Zinzyne #92.

XX Human; ss: antisense therapy; cytostatic; antiinflammatory; haemostatic;

KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;

KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;

KW DNazyme; inozyme; G-cleaver; amberyne; zinzyne; lymphoma; leukaemia;

KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;

KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;

KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;

KW inflammatory arthropathy; central nervous system injury;

KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;

KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;

KW Parkinson's disease; ataxia; Huntington's disease;

KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX Homo sapiens.

OS Synthetic.

OS WO200159103-A2.

XX 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

XX 11-FEB-2000; 2000US-0181797P.

PR 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWIRRA B M.

PI Blatt L, Mcswiggen J, Chowirra BM;

XX WPI; 2001-607195/69.

DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

PT constructs, which down regulate expression of a CD20 gene or neurite

PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

PT central nervous system injury.

XX Claim 30; Page 155; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates

CC expression of a CD20 gene and a nucleic acid molecule which down

CC regulates expression of a neurite growth inhibitor gene (NOGO). The

CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a

CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule

CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or

CC an amberyne (cleaving RNA with an NGN triplet), a zinzyne (cleaving RNA

CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of

CC the cell and treat a patient having a condition associated with the level

CC of CD20. The treatment may further comprise the use of one or more

CC therapies. In particular, the CD20 targeting nucleic acid may be used to

CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-

CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,

CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-

CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the

CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the

CC nucleic acid may be contacted with a cell to reduce NOGO activity of the

CC cell and treat a patient having a condition associated with the level of the

CC NOGO. The treatment may further comprise the use of one or more

CC therapies. In particular, the NOGO-targeting nucleic acid may be used to

CC treat central nervous system (CNS) injury and cerebrovascular accident

CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),

CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob

CC disease, muscular dystrophy, and/or other neurodegenerative disease

CC states which respond to the modulation of NOGO expression. The present

CC sequence is a zinzyne molecule of the invention

XX Sequence 17 BP; 5 A; 4 C; 2 G; 0 T; 6 U; 0 Other;

SQ Query Match 0.6%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 799 TGTAGTAACTCTAAGAA 815

DB 17 TGTGTTACTCTAAGAA 1

RESULT 282

ABN00979

ID ABN00979 standard; DNA; 17 BP.

XX AC ABN00979;

XX 29-MAY-2002 (first entry)

XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:971.

DE Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;

KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

KW skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

OS WO200192524-A2.

PN 06-DEC-2001.

PD 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

PR 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 05-FEB-2001; 2001US-0266860P.

XX (AEOM-) AEOMICA INC.

PA Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;

PI WPI; 2002-179446/23.

DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,

XX or as specific biomolecule capture probes for surface-enhanced laser

PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.

XX Disclosure; SEQ ID NO 971; 214pp; English.

PS The present invention describes a human genome-derived myosin-like

XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-

CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1

CC nucleic acids can be used as probes to detect, characterize and quantify

CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to

CC provide initial substrates for the recombinant engineering of hGDMPLP-1

CC protein variants having desired phenotypic improvements, and for

CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be

CC used as immunogens to raise antibodies that specifically recognise hGDMPLP

-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMPLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption/ionisation, as therapeutic supplement in patients having specific deficiency in hGDMPLP-1 production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a disorder associated with the expression of hGDMPLP-1, in particular heart and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMPLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence

Sequence 17 BP; 5 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.3e-02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1053 CCTGCCCCCAACCCAA 1069
||| ||||| |||||
Db 1 CCAGGCCCAACCCAA 17

RESULT 283
ABN00980
ID ABN00980 standard; DNA; 17 BP.
AC ABN00980;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:972.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption/ionization, comprises human myosin-like protein hGDMPLP-1.
XX

PS Disclosure; SEQ ID NO 972; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.3e-02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1054 CTGCCCCCAACCCAAAG 1070
||| ||||| |||||
Db 1 CAGGCCCAACCCCAAG 17

RESULT 284
ABK19363/c
ID ABK19363 standard; RNA; 17 BP.
XX
AC ABK19363;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG Amberzyme target sequence Seq ID No 2010.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
DR (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX
DR WPI; 2002-082995/11.
XX

PT Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

PS Claim 4; Page 127; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiodioma of tuberosus sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABLI7354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention

SQ Sequence 17 BP; 4 A; 4 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 752 GCACCTGCCATGCAGGT 768
|||||
Db 17 GCACATGCATGCAGTT 1

RESULT 285

ABT34732/C

ID ABT34732 standard; DNA; 17 BP.

XX

AC ABT34732;

XX

DT 12-JUN-2003 (first entry)

XX

DE Tumour suppression related human fukutin oligo SEQ ID No 369.

XX

KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.

XX

OS Homo sapiens.

XX

FN WO2003025175-A2.

XX

PD 27-MAR-2003.

XX

PF 17-SEP-2002; 2002WO-IB004208.

XX

PR 17-SEP-2001; 2001FR-00011978.

XX

PA (MOLE-) MOLECULAR ENGINES LAB.

XX

PI Telerman A, Amson R, Tuijnder M;

XX

DR WPI; 2003-313353/30.

XX

XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.

PS Disclosure; Page 77; 720pp; French.

XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention

SQ Sequence 17 BP; 1 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1289 CCCACAGCCACAGC 1305

|||||
Db 17 CCCACAGCCACAGATC 1

RESULT 286

ABT35098/C

ID ABT35098 standard; DNA; 17 BP.

XX

AC ABT35098;

XX

DT 12-JUN-2003 (first entry)

XX

DE Tumour suppression related human fukutin oligo SEQ ID No 735.

XX

KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;

XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;

XX schizophrenia; protein chip; gene therapy; tumour suppression;

XX human fukutin; ds.

XX

OS Homo sapiens.

XX

FN WO2003025175-A2.

XX

PD 27-MAR-2003.

XX

PF 17-SEP-2002; 2002WO-IB004208.

XX

PR 17-SEP-2001; 2001FR-00011978.

XX

PA (MOLE-) MOLECULAR ENGINES LAB.

XX

PI Telerman A, Amson R, Tuijnder M;

XX

DR WPI; 2003-313353/30.

XX

PT New isolated nucleic acid, useful for treating viral diseases associated

PT with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.

PS Disclosure; Page 120; 720pp; French.

XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterized by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention

XX
SQ Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 968 GTTGAAGTCCAGATC 984

DB 17 GTTGAAGTCCAGATC 1

RESULT 287

ACA06764

ID ACA06764 standard; RNA; 17 BP.

XX ACA06764;

XX 03-JUN-2003 (first entry)

XX NFkB sub-unit modulating inozyme substrate #583.

XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
KW G-cleaver; amperzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.

XX Homo sapiens.

XX US2002177568-A1.

XX 28-NOV-2002.

XX 23-MAY-2001; 2001US-00864785.

XX 07-DEC-1992; 92US-00987132.

PR 18-MAY-1994; 94US-00245466.

PR 15-AUG-1994; 94US-00291932.
XX 23-DEC-1996; 95US-00777916.

XX (STIN/) STINCHOMB D T.

PA (MCSW/) MCSWIGGEN J.

PA (DRAP/) DRAPER K G.

PI Stinchcomb DT, Mcswiggen J, Draper KG;

XX WPI; 2003-340953/32.

XX Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.

XX Claim 3; Page 35; 72pp; English.

CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amperzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule

XX
SQ Sequence 17 BP; 2 A; 12 C; 0 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 2.3e+02;

Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCAACCC 1267

DB 1 CCCCATCCCCAUCC 17

RESULT 288

ABZ61919

ID ABZ61919 standard; RNA; 17 BP.

XX AC

XX ABZ61919;

XX 21-MAR-2003 (first entry)

XX Human H-Ras DNAzyme target #710.

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.

XX Homo sapiens.

XX WO200297114-A2.

XX 05-DEC-2002.


```
PF 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 124; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 3 A; 1 C; 9 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. NO. 2.3e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
Qy 821 TGGAGTGCACGAGTTG 837
Db 1 UGGAGUGGACGAGGUUG 17
RESULT 289
ABZ64907/c
ID ABZ64907 standard; RNA; 17 BP.
XX
AC ABZ64907;
XX
XX 21-MAR-2003 (first entry)
XX
DE Human HER2 DNazyme substrate #364.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 124; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 3 A; 1 C; 9 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. NO. 2.3e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
Qy 821 TGGAGTGCACGAGTTG 837
Db 1 UGGAGUGGACGAGGUUG 17
RESULT 289
ABZ64907/c
ID ABZ64907 standard; RNA; 17 BP.
XX
AC ABZ64907;
XX
XX 21-MAR-2003 (first entry)
XX
DE Human HER2 DNazyme substrate #364.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 4; Page 140; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 4 A; 3 C; 8 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. NO. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1112 GTCCCGTGCCAGTTCC 1128
Db 17 GTCCACGTGCCAGTTCC 1
RESULT 290
ACD59296
ID ACD59296 standard; RNA; 17 BP.
XX
AC ACD59296;
XX
XX 24-SEP-2003 (first entry)
XX
DE HCV DNazyme substrate sequence #1266.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis C virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PASC/) PAVCO P.
PA (LEBP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
```

XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 XX PT Draper K, Roberts E;
 XX DR WPI; 2003-229207/22.
 XX
 XX Novel compound useful for treating cirrhosis, liver failure,
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 XX PT infection.
 XX
 XX Claim 1; Page 256; 387pp; English.
 XX
 XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, ambrzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNazyme or minus strand DNazyme sequences disclosed in the present
 CC invention
 XX
 XX Sequence 17 BP; 3 A; 10 C; 2 G; 0 T; 2 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 2.3e+02;
 Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1085 CAGGCTTCACCCCCACC 1101
 Db 1 CAGGCTTCACCCCCCAUC 17
 RESULT 291
 AAQ70337
 ID AAQ70337 standard; DNA; 18 BP.
 XX
 XX AAQ70337;
 XX
 XX 25-MAR-2003 (revised)
 DT 15-FEB-1995 (first entry)
 XX
 XX Antisense oligonucleotide for human FGF.
 DE
 XX Fibroblast growth factor; hybridisation; laser procedures;
 KW vascular smooth muscle cell; proliferation; SMC; vascular stenosis;
 KW post angioplasty restenosis; atherosclerosis; cardiac hypertrophy;
 KW organ transplant; ss.
 XX
 XX Synthetic.
 OS
 XX WO9415945-A1.
 FN
 XX 21-JUL-1994.
 PD
 XX 28-DEC-1993; 93WO-US012600.
 PF
 XX 31-DEC-1992; 92US-00999706.
 PR
 XX (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 PA
 XX Denner LA, Rege AA, Dixon RA;
 PI
 XX WPI; 1994-249123/30.
 DR

XX
 PT New anti-sense polynucleotide(s) to fibroblast growth factor receptor -
 PT used for inhibiting vascular smooth muscle cell proliferation, partic.
 PT for treating restenosis.
 XX
 XX Claim 3; Page 8; 53pp; English.
 XX
 XX The sequence is an antisense molecule directed against the gene for human
 CC fibroblast growth factor 1. The polynucleotide can be used for inhibiting
 CC vascular smooth muscle cell proliferation and for treating a disease e.g.
 CC vascular stenosis, post angioplasty restenosis, atherosclerosis,
 CC atherosclerosis, atrial venous shunt failure, cardiac hypertrophy,
 CC vascular surgery and organ transplant. See also AAQ70333-60. (Updated on
 CC 25-MAR-2003 to correct PN field.)
 XX
 XX Sequence 18 BP; 4 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 2.8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1134 CACCTCCAGCTCCACCT 1150
 Db 1 CACCTCCAGCTCCACAT 18
 RESULT 292
 AAV02721
 ID AAV02721 standard; DNA; 18 BP.
 XX
 XX AAV02721;
 XX
 XX 19-MAY-1998 (first entry)
 DT
 XX Human Class I HLA gene probe GE2-183.
 DE
 XX Human leukocyte antigen class I gene; allele testing; probe; donor;
 KW tissue matching; recipient; graft rejection; class typing; ds.
 KW
 XX Synthetic.
 OS
 XX Homo sapiens.
 OS
 XX WO9723645-A1.
 FN
 XX 03-JUL-1997.
 PD
 XX 04-JAN-1996; 96WO-US000362.
 PF
 XX 04-JAN-1996; 96WO-US000362.
 PR
 XX (SLOK) SLOAN KETTERING INST CANCER RES.
 PA
 XX Yang SY, Cereb N;
 PI
 XX WPI; 1997-351080/32.
 DR
 XX DNA-based human leukocyte antigen class I gene typing method - useful for
 PT tissue matching and prevention of graft versus host disease.
 PT
 XX Disclosure; Page 10; 89pp; English.
 PS
 XX AAV02716-V02738 are hybridisation probes used in a novel method for
 CC testing tissue samples to determine the allelic type of a human leukocyte
 CC antigen (HLA) class I gene in the sample. The HLA Class I gene is
 CC selected from among HLA-A, -B and -C genes. The method comprises of
 CC treating the tissue sample to obtain nucleic acid polymers suitable for
 CC amplification then combining these polymers with a first primer which
 CC hybridises with a portion of intron 1 or intron 3 of the HLA Class I gene
 CC and a second primer which hybridises with a different portion of the HLA
 CC Class I gene under conditions suitable for amplification to obtain an
 CC amplified product. The product is then evaluated to determine the allelic
 CC type of the HLA-Class I gene. The method is useful for tissue matching
 CC HLA class I antigens between donors and recipients and hence for

```

CC preventing graft versus host disease
SQ Sequence 18 BP; 7 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
  Query Match      0.6%; Score 13.8; DB 1; Length 18;
  Best Local Similarity 88.2%; Pred. No. 2.8e+02;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

  QY 731 AGGAGAAACAGAACACC 747
      ||||| ||||| |||||
  Db 2 AGGAGACACGGAACACC 18

RESULT 293
ID AAA11105 standard; DNA; 18 BP.
AC AAA11105;
XX
XX 06-JUN-2001 (first entry)
XX
DE Zinc finger coding sequence related oligo SEQ ID NO: 94.
XX
KW Leptin; human; LSR; lipolysis stimulated receptor; obesity; hypertension;
KW anorexia; cachexia; stroke; atherosclerosis; ds.
XX
OS Synthetic.
XX
PN WO200121647-A2.
XX
PD 29-MAR-2001.
XX
PF 22-SEP-2000; 2000WO-IB001470.
XX
PR 22-SEP-1999; 99US-0155506P.
XX
PA (GEST ) GENSET.
XX
PI Yen F, Erickson MR, Fruebis J, Bihain B;
XX
XX WPI; 2001-218642/22.
XX
PT New leptin polypeptide fragment and related polynucleotides, useful for
PT the prevention and treatment of obesity and obesity-related diseases such
PT as hypertension and diabetes.
XX
PS Example 12; Page 245; 247pp; English.
XX
CC The present invention provides the protein and coding sequences of leptin
CC fragments which modulate the activity of lipolysis stimulated factor
CC (LSR). These sequences are useful in the treatment of obesity related
CC diseases, including obesity, anorexia, cachexia, cardiac and coronary
CC insufficiency, stroke, hypertension, atherosclerosis, atheromatous disease,
CC atherosclerosis, non-insulin dependent diabetes, hyperlipidaemia,
CC hyperuricaemia and syndrome X
XX
SQ Sequence 18 BP; 2 A; 3 C; 11 G; 2 T; 0 U; 0 Other;
  Query Match      0.6%; Score 13.8; DB 1; Length 18;
  Best Local Similarity 88.2%; Pred. No. 2.8e+02;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

  QY 1235 CAGCCCTCGCTCCGAC 1251
      ||||| ||||| |||||
  Db 17 CAGCCCTCGCTCCGAC 1

RESULT 295
ID ABL43961 standard; DNA; 18 BP.
XX
XX ABL43961;
AC ABL43961;
XX
XX 11-APR-2002 (first entry)
XX
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1005.
XX
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;

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```

CC preventing graft versus host disease
SQ Sequence 18 BP; 7 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
  Query Match      0.6%; Score 13.8; DB 1; Length 18;
  Best Local Similarity 88.2%; Pred. No. 2.8e+02;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

  QY 731 AGGAGAAACAGAACACC 747
      ||||| ||||| |||||
  Db 2 AGGAGACACGGAACACC 18

RESULT 293
ID AAA11105 standard; DNA; 18 BP.
AC AAA11105;
XX
XX 28-JUL-2000 (first entry)
XX
DE Hybridisation probe GE2-183 for typing HLA Class I genes.
XX
KW Tissue sample testing; allelic typing; human leukocyte antigen;
KW PCR primer; probe; hybridisation; intron; amplification; ss;
KW allelic variation; non-classical HLA class I gene; exon.
XX
OS Homo sapiens.
XX
PN US6030775-A.
XX
PD 29-FEB-2000.
XX
PF 22-DEC-1995; 95US-00577081.
XX
PR 22-DEC-1995; 95US-00577081.
XX
PA (CERE//) CERE B N.
PA (YANG//) YANG S Y.
PI Cereb N, Yang SY;
XX
XX WPI; 2000-223159/19.
XX
PT Testing a tissue sample to determine the allelic type of a human
PT leukocyte antigen class I gene comprises amplification of nucleic acid
PT polymers with primers which flank a region including an allelic variation
PT of the HLA class I gene.
XX
PS Disclosure; Col 8; 90pp; English.
XX
CC The invention relates to a method (I) for testing a tissue sample to
CC determine the allelic type of a human leukocyte antigen (HLA) class I
CC gene in the sample, where the HLA class I gene is selected from HLA-A,
CC HLA-B or HLA-C, by: (a) treating the tissue sample to obtain nucleic acid
CC polymers suitable for amplification; (b) combining the nucleic acid
CC polymers with a primer which hybridizes with a portion of intron 1 or
CC intron 3 of the HLA class I gene, and a second primer which hybridizes
CC with a different portion of the HLA class I gene and performing
CC amplification, where the primers flank a region including at least one
CC site of allelic variation in at least one of exons 2 or 3 of the HLA
CC class I gene and where the first primer is a locus specific primer which
CC hybridizes with intron 1 or 3 of only one of the HLA class I genes; and
CC (c) evaluating the amplified product to determine the allelic type of the
CC HLA class I gene. The method is useful for testing a tissue sample to
CC determine the allelic type of a classical or non-classical HLA class I
CC gene in the sample. The sequences AAA11039-A11122 represent consensus
CC sequences of introns and exons of the HLA genes and primers and probes
CC used to isolate and analyse the HLA genes
XX
SQ Sequence 18 BP; 7 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
  Query Match      0.6%; Score 13.8; DB 1; Length 18;

```



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XX WO200071751-A1.
XX
XX 30-NOV-2000.
XX
XX 16-MAY-2000; 2000WO-US013327.
XX
XX 21-MAY-1999; 99US-0135423P.
XX
XX 06-JAN-2000; 2000US-0174700P.
XX
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX McGrail M, Russell DL, Shattuck DM;
XX
XX WPI; 2001-025172/03.
XX
XX Novel angiotensinogen gene, mutant alleles of which causes susceptibility
XX to insulin-dependent diabetes mellitus useful for diagnosis of
XX predisposition to diabetes.
XX
XX Example 2; Page 33; 83pp; English.
XX
XX The invention relates to the human angiotensinogen (AGT) gene, some
XX mutant alleles of which cause a susceptibility to insulin-dependent
XX diabetes mellitus (IDDM, type 1 diabetes). The AGT gene is located on
XX chromosome 1q42-43, a region linked to IDDM. The invention discloses
XX genomic sequences comprising exons 1-5 of the human AGT gene (AAC91600-
XX C91604) and a genomic sequence comprising an alternative AGT gene exon 1
XX (AAC91606). The invention also encompasses the specifically claimed human
XX AGT mutant nucleic acid sequences AAC91667-C91684, and the mutant
XX angiotensinogen proteins AAB48945-B48949. The invention also relates
XX to detecting mutant AGT alleles or gene products thereof which are related
XX to IDDM; determining whether a person has, or is at risk of developing
XX diabetes via detection of a polymorphism in the AGT gene; and methods of
XX screening for drug candidates which may be useful in the treatment of
XX diabetes resulting from an AGT mutation. Methods of preventing or
XX treating diabetes are claimed which comprise the administration of a
XX compound which agonises or antagonises wild-type or mutant AGT, which
XX agonises or antagonises an AGT receptor, which inhibits AGT gene
XX expression, or which cleaves AGT proteins. In addition, the invention
XX encompasses a transgenic non-human animal, or cell line derived
XX therefrom, comprising a mutant human AGT allele. The polymorphisms
XX identified in the AGT gene are useful for determining if a person has, or
XX is at risk from developing insulin-dependent diabetes mellitus. AGT
XX modulators can be used to treat or prevent diabetes. Mutant AGT proteins
XX or fragments thereof are useful for screening compounds which bind to AGT
XX polypeptides. The present sequence represents a human AGT gene exon 2 PCR
XX primer used in an exemplification of the invention
XX
XX Query Match 0.6%; Score 13.8; DB 1; Length 19;
XX Best Local Similarity 88.2%; Pred. No. 3.3e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1263 CCCCTTCAGAGTGGG 1279
XX 19 CACCTTCGAGAGTGGG 3
XX
XX RESULT 298
XX AAF47943
XX ID AAF47943 standard; DNA; 15 BP.
XX
XX AAF47943;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGFBP3 oligonucleotide #1363.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX

```

IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CV, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 53; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic diseases, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 3 A; 9 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 15;

Best Local Similarity 93.3%; Pred. No. 2e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1086 AGGCTTCACCCCCAC 1100

Db 1 ACGCTTCACCCCCAC 15

RESULT 299

AAF47942

ID AAF47942 standard; DNA; 15 BP.

XX

XX AAF47942;

XX

XX 30-MAR-2001 (first entry)

XX

XX IGFBP3 oligonucleotide #1362.

XX

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;

XX

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;

XX

```

KW neovascular condition of the retina; ss.
XX Homo sapiens.
OS
XX
XX WO200078341-A1.
XX
XX PD 28-DEC-2000.
XX
XX PF 21-JUN-2000; 2000WO-AU000693.
XX
XX PR 21-JUN-1999; 99US-0140345P.
XX
XX PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX PI Wright CJ, Werther GA, Edmondson SR;
XX
XX DR WPI; 2001-041421/05.
XX
XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX
XX PS Example 7; Page 53; 201pp; English.
XX
XX CC The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, [for insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3], which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAP45151 and AAP45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX
XX SQ Sequence 15 BP; 3 A; 9 C; 1 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCCA 1099
Db 1 CACGCTTCACCCCA 15

RESULT 300
AAF47945
ID AAF47945 standard; DNA; 15 BP.
XX
XX AC AAF47945:
XX
XX 30-MAR-2001 (first entry)
DT
XX
XX IGFBP3 oligonucleotide #1365.
DE
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
OS
XX Homo sapiens.
XX

```


XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX Claim 8; Fig 5; 214pp; English.
XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1073 TCAGTCCCACTCCAG 1087
Db 15 TGAGTCCCACTCCAG 1
RESULT 304
AAC72258/c
ID AAC72258 standard; DNA; 17 BP.
XX AC AAC72258;
XX DT 09-FEB-2001 (first entry)
XX DE Single nucleotide polymorphism PCR primer #1392.
XX KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200058519-A2.
XX PD 05-OCT-2000.
XX PF 30-MAR-2000; 2000WO-US008440.
XX PR 31-MAR-1999; 99US-0127248P.
XX PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX PA (AFY-) AFYMETRIX INC.
XX PI Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX DR WPI; 2000-611722/58.
XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX Claim 8; Fig 5; 214pp; English.
XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be

CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1073 TCAGTCCCACTCCAG 1087
Db 15 TGAGTCCCACTCCAG 1
RESULT 305
AAF07186
ID AAF07186 standard; DNA; 17 BP.
XX AC AAF07186;
XX DT 16-FEB-2001 (first entry)
XX DE Hammerhead ribozyme substrate #3443.
XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX OS Homo sapiens.
XX PN WO200061729-A2.
XX PD 19-OCT-2000.
XX PF 11-APR-2000; 2000WO-US009721.
XX PR 12-APR-1999; 99US-0129390P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX DR WPI; 2000-647423/62.
XX PT Enzymatic and antisense nucleic acid inhibition of repressor genes.
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX PS Claim 54; Page 135; 164pp; English.
XX CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1065 CCCAAGCTTCAGTCC 1079
Db 1 CCCAAGCTTCAGTCC 15
RESULT 306
ABK02377/c

ID ABK02377 standard; RNA; 17 BP.
 AC ABK02377;
 XX
 DT 12-MAR-2002 (first entry)
 DE Human Nogo Ambrzyme #49.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; Nogo; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; ambrzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowrira BM;
 XX WPI; 2001-607195/69.
 DR
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
 PT
 PS Claim 88; Page 131; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (Nogo). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NGH motif), a G-cleaver (cleaving RNA with a NYN motif) or an ambrzyme (cleaving RNA with an NGN tripler), a zinzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg²⁺. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The Nogo-targeting nucleic acid is used to cleave RNA of the Nogo gene in the presence of a divalent cation that is preferably Mg²⁺. Furthermore, the nucleic acid may be contacted with a cell to reduce Nogo activity of the cell and treat a patient having a condition associated with the level of Nogo. The treatment may further comprise the use of one or more

CC therapies. In particular, the Nogo-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease. CC states which respond to the modulation of Nogo expression. The present CC sequence is an ambrzyme molecule of the invention
 XX
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 2.9e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 1134 CACCTCCAGCTCCAC 1148
 Db 15 CACCTCCAGCTCCCTC 1
 RESULT 307
 ABK01806/c
 ID ABK01806 standard; RNA; 17 BP.
 XX
 AC ABK01806;
 XX
 DT 12-MAR-2002 (first entry)
 DE Human Nogo Zinzyme #128.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; Nogo; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; ambrzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowrira BM;
 XX WPI; 2001-607195/69.
 DR
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
 PT
 PS Claim 88; Page 98; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates

expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving a RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a zinzyme molecule of the invention

Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 2.9e+02; Mismatches 1; Indels 0; Gaps 0;

QY 1135 ACCTCCAGCTCCACC 1149

DB 17 ACCTCCAGCTCTCC 3

RESULT 308

ABA77714

ID ABA77714 standard; DNA; 17 BP.

AC ABA77714;

XX 24-JAN-2002 (first entry)

DE Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 560.

Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1; Alzheimer's disease; cytosolic; antisticking; antianaemic; haemostatic; antilipemic; ss.

OS Homo sapiens.

XX WO200173002-A2.

PN 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

XX 27-MAR-2000; 2000US-0192179P.

PR 01-JUN-2000; 2000US-0208538P.
ER 30-OCT-2000; 2000US-0244989P.
XX (UYDE) UNIV DELAWARE.
FA Kmiec EB, Gamper HB, Rice MC;
XX MPI; 2001-639230/73.

XX Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.

Claim 7; Page 77; 294pp; English.

The present invention provides single-stranded oligonucleotides which can be used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6, apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and presenilin-2 (PSEN2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention

Sequence 17 BP; 5 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 2.9e+02; Mismatches 1; Indels 0; Gaps 0;

QY 953 TGTATCGCTACCAAC 967

DB 3 TGTATCGCTACCAAC 17

RESULT 309

ABA77713/c

ID ABA77713 standard; DNA; 17 BP.

AC ABA77713;

XX 24-JAN-2002 (first entry)

DE Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 559.

Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1; Alzheimer's disease; cytosolic; antisticking; antianaemic; haemostatic; antilipemic; ss.

OS Homo sapiens.

XX WO200173002-A2.

PN 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

```

PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
XX (UYDE ) UNIV DELAWARE.
XX
XX Kmiec EB, Gamper HB, Rice MC;
XX
XX WPI; 2001-639230/73.
XX
XX Oligonucleotide for targeted alterations of genetic sequences and for
XX treating cystic fibrosis, comprises at least one mismatch and chemical
XX modification.
XX
XX Claim 7; Page 77; 294pp; English.
XX
XX The present invention provides single-stranded oligonucleotides which can
XX be used for the targeted alteration of genomic sequences, where the
XX oligonucleotide has at least one mismatch compared with the genomic
XX sequence to be altered. In particular, these sequences are directed at
XX the following genes: adenosine deaminase, p53, beta-globin,
XX retinoblastoma, BRCAL, BRCA2, CTRK, cyclin-dependent kinase inhibitor 2A
XX (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
XX 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
XX such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
XX Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX various syndromes. The present sequence is one of the gene correcting
XX oligonucleotides of the invention
XX
XX Sequence 17 BP; 6 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 2.9e+02;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 953 TGTATCGCTACCAAC 967
XX 15 TGTATCGCTACCAAC 1
XX
XX Db
XX
XX RESULT 310
XX ABN00981
XX ID ABN00981 standard; DNA; 17 BP.
XX
XX AC ABN00981;
XX
XX DT 29-MAY-2002 (first entry)
XX
XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:973.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200192524-A2.
XX
XX PD 06-DEC-2001.
XX
XX PF 25-MAY-2001; 2001WO-US016981.
XX
XX PR 26-MAY-2000; 2000US-0207456P.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-00024263.
XX PR 30-JAN-2001; 2001WO-US000661.
XX PR 30-JAN-2001; 2001WO-US000662.
XX PR 30-JAN-2001; 2001WO-US000663.
XX
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) ABOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 973; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption/ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 5 A; 7 C; 5 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 2.9e+02;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1056 GGCCCCCAACCAAG 1070
XX 2 GGCCCCCAACCAAG 16
XX
XX Db
XX
XX RESULT 311
XX ABN00982
XX ID ABN00982 standard; DNA; 17 BP.
XX
XX AC ABN00982;
XX
XX DT 29-MAY-2002 (first entry)
XX
XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:974.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200192524-A2.
XX
XX PD
XX
XX PF
XX
XX PR
XX
XX KW
XX
XX OS
XX
XX PN
XX
XX

```

PD 06-DEC-2001.
XX 25-MAY-2001; 2001WO-US016981.
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 30-JAN-2001; 2001WO-US000670.
XX 05-FEB-2001; 2001US-0266860P.
XX (AEOM-) AEOMICA INC.
PA
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 974; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption/ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 4 A; 7 C; 6 G; 0 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1056 GGCCCCAAGCCCAAG 1070
DB 1 GGCCCCAAGCCCAAG 15
RESULT 312
ABK18858/c
ID ABK18858 standard; RNA; 17 BP.
XX
XX AC ABK18858;
XX
XX DT 09-APR-2002 (first entry)

XX Human ERG DNazyme target sequence Seq ID No 1505.
DE
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;
KW amberzyme.
XX
XX Homo sapiens.
XX WO200188124-A2.
XX
XX 22-NOV-2001.
XX
XX 16-MAY-2001; 2001WO-US015866.
XX
XX 16-MAY-2000; 2000US-00572021.
XX (RIBO-) RIBOZYME PHARM INC.
XX (GLAX) GLAXO GROUP LTD.
XX
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX Claim 4; Page 93; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX
XX Sequence 17 BP; 3 A; 4 C; 5 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 752 GCACCTGCCATGCAG 766
DB 16 GCACATGCCATGCAG 2

AC ABT37525;
XX DT 12-JUN-2003 (first entry)
XX DE Tumour suppression related human fukutin oligo SEQ ID No 3162.
XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizoprenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.
XX OS Homo sapiens.
XX PN WO2003025175-A2.
XX PD 27-MAR-2003.
XX PF 17-SEP-2002; 2002WO-IB004208.
XX PR 17-SEP-2001; 2001FR-00011978.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX DR New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.
XX PS Disclosure; Page 403; 720pp; French.
XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX CC given in the specification, a sequence containing at least 15 consecutive
XX CC nucleotides from the 17 mer sequence, a sequence with, after optimal
XX CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX CC hybridizes to them under highly stringent conditions, or the complement
XX CC of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acids of the invention are useful as probes and primers for detecting,
XX CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX CC component of a gene chip, in vitro as (anti)sense reagents, and for
XX CC production of recombinant polypeptides. Any of the nucleic acids,
XX CC polypeptides, vectors containing the nucleic acids, cells containing the
XX CC preparation of pharmaceuticals for prevention and/or treatment of viral
XX CC diseases that are characterised by development of tumours or cell
XX CC degeneration, specifically cancer but also Alzheimer's disease and
XX CC schizoprenia. Analysis of the expression of the 17 mer nucleic acids in
XX CC patient samples is useful for diagnosis and/or prognosis of these
XX CC diseases. The polypeptides can also be used to generate antibodies, and
XX CC both the polypeptide and antibodies are useful as components of protein
XX CC chips. The nucleic acid sequences of the invention can be used in gene
XX CC therapy. This polynucleotide sequence represents a tumour suppression
XX CC related human fukutin oligonucleotide of the invention
XX SQ Sequence 17 BP; 4 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 882 CACCACAGTGGTGT 896
DB 16 CACCACAGTGGTGT 2
RESULT 316
ACD53467
ID ACD53467 standard; RNA; 17 BP.
XX AC ACD53467;
XX AC

DT 24-SEP-2003 (first entry)
XX HBV G-cleaver substrate sequence #155.
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
XX aptamer; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX Hepatitis B virus.
XX WO200281494-A1.
XX PD 17-OCT-2002.
XX PF 26-MAR-2002; 2002WO-US009187.
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWISSEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;
XX Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX Example 1; Page 168; 387pp; English.
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
XX inozymes, zinzymes, aptamers, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HBV
XX ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or aptamer sequences
XX disclosed in the present invention
XX SQ Sequence 17 BP; 0 A; 2 C; 4 G; 0 T; 11 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 26.7%; Pred. No. 2.9e+02;
Matches 4; Conservative 10; Mismatches 1; Indels 0; Gaps 0;

QY 909 TTCTCTTGGTCTTG 923
:::|:::|:::|:::|
Db 1 UUUUUUUUGUCUU 15

RESULT 317
ACD52078
ID ACD52078 standard; RNA; 17 BP.
XX AC
XX ACD52078;
XX 24-SEP-2003 (first entry)
XX DB
XX HBV inozyme substrate sequence #208.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyne;
XX anberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX Hepatitis B virus.
XX OS
XX FN WO200281494-A1.
XX PD 17-OCT-2002.
XX PF 26-MAR-2002; 2002WO-US009187.
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX (RIBO-) RIBOZYME PHARM INC.
FA (BLAT/) BLATT L.
FA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
FA (LEEP/) LEE P.
FA (DRAP/) DRAPER K.
FA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX DR

XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX Example 1; Page 154; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNAszymes,
XX inozymes, zinzyms, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyne, DNAzyme or amberzyme sequences
CC disclosed in the present invention
XX
XX Sequence 17 BP; 2 A; 3 C; 1 G; 0 T; 11 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 26.7%; Pred. No. 2.9e+02;
Matches 4; Conservative 10; Mismatches 1; Indels 0; Gaps 0;
QY 907 ATTTCTTGGTCTT 921
|:::|:::|:::|
Db 3 AUUUUUUUUGUCUU 17

RESULT 318
ADB45859/C
ID ADB45859 standard; DNA; 17 BP.
XX AC ADB45859;
XX DT
XX 18-DEC-2003 (first entry)
XX DE Tumour suppression/reversion associated nucleotide #6182.
XX KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX KW primer; probe; tumour suppression; tumour reversion; apoptosis;
XX KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX KW diagnosis.
XX OS Homo sapiens.
XX FN WO2003040369-A2.
XX PD 15-MAY-2003.
XX PF 17-SEP-2002; 2002WO-IB004219.
XX PR 17-SEP-2001; 2001FR-00011981.
XX FA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-441574/41.
XX New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.
XX Disclosure; Page 754; 771pp; French.

XX The invention relates to the isolation of 5327 nucleotide sequences,
XX fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX sequence having at least 80% identity, after optimal alignment, with the
XX nucleotides, a sequence that hybridizes under stringent conditions with
XX the nucleotides, or the complement, or corresponding RNA, of the
XX nucleotides. The nucleotides are used as probes or primers for detecting,
XX identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX sense and antisense sequences, of nucleotides involved in tumour
XX suppression or reversion, apoptosis and or viral resistance, to produce
XX recombinant polypeptides, and to prepare transgenic animals, as
XX experimental models. The nucleotides (also vectors containing them and
XX cells containing the vectors), the encoded polypeptides and antibodies
XX (Ab) against the polypeptide are useful for prevention and/or treatment
XX of viral infections or diseases characterized by development of tumours
XX or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX Analysis of the expression of the nucleotides can be used for diagnosis
XX and/or prognosis of these diseases. The nucleotides and polypeptides can
XX also be used to screen for their specific interactive molecules,
XX potentially useful for treating diseases associated with abnormal
XX expression of the nucleotides.

XX SQ Sequence 17 BP; 3 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 2.9e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 882 CACCACAGTGTGTT 896
 DB 16 CACCACAGTGTGAT 2

RESULT 319
 ADB45835/C
 ID ADB45835 standard; DNA; 17 BP.
 XX AC ADB45835;
 XX DT 18-DEC-2003 (first entry)
 XX DE Tumour suppression/reversion associated nucleotide #6158.
 XX KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX OS Homo sapiens.
 XX PN WO2003040369-A2.
 XX PD 15-MAY-2003.
 XX PF 17-SEP-2002; 2002WO-IB004219.
 XX PR 17-SEP-2001; 2001FR-00011981.
 XX PA (MOLE-) MOLECULAR ENGINES LAB.
 XX PI Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-441574/41.
 XX New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX Disclosure; Page 751; 771pp; French.
 CC The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and/or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

XX SQ Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 2.9e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 861 TAAGGGGCACTGAGGA 875
 DB 17 TAAGGCACTGAGGA 3

RESULT 320
 ACD53740
 ID ACD53740 standard; RNA; 17 BP.
 XX AC ACD53740;
 XX DT 24-SEP-2003 (first entry)
 XX DE HBV zinzyme substrate sequence #12.
 XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinzyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX OS Hepatitis B virus.
 XX PN WO200281494-A1.
 XX PD 17-OCT-2002.
 XX PF 26-MAR-2002; 2002WO-US009187.
 XX PR 26-MAR-2001; 2001US-00817879.
 XX PR 08-JUN-2001; 2001US-00877478.
 XX PR 08-JUN-2001; 2001US-0296876P.
 XX PR 24-OCT-2001; 2001US-0335059P.
 XX PR 05-DEC-2001; 2001US-0337055P.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEBP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX Example 1; Page 173; 387pp; English.
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
 CC disclosed in the present invention.

XX
 SQ Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 2.9e+02;
 Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1297 CCACAGAGCTAGAC 1311
 Db 2 CCACAGAGUCUAGAC 16
 |||||:||||
 |||||:||||

RESULT 321
 AAV14107/C
 ID AAV14107 standard; DNA; 18 BP.
 XX AC AAV14107;
 XX AC
 XX DT 27-AUG-2003 (revised)
 XX DT 19-MAY-1998 (first entry)
 XX DE Probe HBPr273 for RT pol region of HBV.
 XX KW Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
 XX KW preCore region; HBsAg region; genotype specific target;
 XX KW mutation detection; ss.
 XX OS Synthetic.
 XX OS Hepatitis B virus.
 XX PN WO9740193-A2.
 XX PD 30-OCT-1997.
 XX PF 21-APR-1997; 97WO-EP002002.
 XX PR 19-APR-1996; 96EP-00870053.
 XX PA (INNO-) INNOGENETICS NV.
 XX PI Stuyver L, Rossau R, Maertens G;
 XX DR WPI; 1997-535867/49.
 XX PS Claim 5; Fig 1; 80pp; English.

CC This sequence represents a probe for the RT pol region of hepatitis b
 CC virus (HBV). This sequence can be used in the method of the invention for
 CC detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.
 CC The method comprises: (a) optionally releasing, isolating or
 CC concentrating polynucleic acids (I) in the sample, and amplifying the
 CC relevant part of a suitable HBV gene in the sample with at least 1
 CC suitable primer pair; (b) hybridising (I) with a combination of at least
 CC 2 nucleotide probes, which are applied to known locations on a solid
 CC support and hybridise specifically to mutant target sequences chosen from
 CC the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV
 CC genotype specific target sequences, or their complements or U for T
 CC homologues; (c) detecting the hybrids formed in step (b), and inferring
 CC the HBV genotype and/or mutants present in the sample from the
 CC differential hybridisation signal(s). The composition can be used to
 CC diagnose and/or monitor HBV mutants and/or genotypes in a sample,
 CC specifically genotype, preCore mutations, vaccine escape mutations and RT
 CC mutations selected by treatment with drugs.

CC gene mutations selected by treatment with drugs, e.g. lamivudine and
 CC penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX
 SQ Sequence 18 BP; 1 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 3.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 728 GCCAGGAGAAACAGA 742
 Db 18 GCCAGGAGAAACGGA 4
 |||||:|||||
 |||||:|||||

RESULT 322
 AAV14104/C
 ID AAV14104 standard; DNA; 18 BP.
 XX AC AAV14104;
 XX AC
 XX DT 27-AUG-2003 (revised)
 XX DT 19-MAY-1998 (first entry)
 XX DE Probe HBPr270 for RT pol region of HBV.
 XX KW Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
 XX KW preCore region; HBsAg region; genotype specific target;
 XX KW mutation detection; ss.
 XX OS Synthetic.
 XX OS Hepatitis B virus.
 XX PN WO9740193-A2.
 XX PD 30-OCT-1997.
 XX PF 21-APR-1997; 97WO-EP002002.
 XX PR 19-APR-1996; 96EP-00870053.
 XX PA (INNO-) INNOGENETICS NV.
 XX PI Stuyver L, Rossau R, Maertens G;
 XX DR WPI; 1997-535867/49.
 XX PS Claim 5; Fig 1; 80pp; English.

CC This sequence represents a probe for the RT pol region of hepatitis b
 CC virus (HBV). This sequence can be used in the method of the invention for
 CC detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.
 CC The method comprises: (a) optionally releasing, isolating or
 CC concentrating polynucleic acids (I) in the sample, and amplifying the
 CC relevant part of a suitable HBV gene in the sample with at least 1
 CC suitable primer pair; (b) hybridising (I) with a combination of at least
 CC 2 nucleotide probes, which are applied to known locations on a solid
 CC support and hybridise specifically to mutant target sequences chosen from
 CC the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV
 CC genotype specific target sequences, or their complements or U for T
 CC homologues; (c) detecting the hybrids formed in step (b), and inferring
 CC the HBV genotype and/or mutants present in the sample from the
 CC differential hybridisation signal(s). The composition can be used to
 CC diagnose and/or monitor HBV mutants and/or genotypes in a sample,
 CC specifically genotype, preCore mutations, vaccine escape mutations and RT
 CC gene mutations selected by treatment with drugs, e.g. lamivudine and
 CC penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX
 SQ Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

```
Query Match      0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      728 GCCAGGAGAAACAGA 742
DB      18 GCCAAGAGAAACAGA 4

RESULT 323
AAV14106/c
ID      AAV14106 standard; DNA; 18 BP.
XX
XX      AAV14106;
AC
XX
DT      27-AUG-2003 (revised)
DT      19-MAY-1998 (first entry)
XX
XX      Probe HBPz272 for RT pol region of HBV.
XX
XX      Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
KW      preCore region; HBsAg region; genotype specific target;
KW      mutation detection; ss.
XX
XX      Synthetic.
OS
OS      Hepatitis B virus.
XX
XX      WO9740193-A2.
PN
XX
XX      30-OCT-1997.
PD
XX
XX      21-APR-1997; 97WO-EP002002.
PF
XX
XX      19-APR-1996; 96EP-00870053.
PR
XX
XX      (INNO-) INNOGENETICS NV.
PA
XX
XX      Stuyver L, Rossau R, Maertens G;
PI
XX
XX      WPI; 1997-535867/49.
DR
XX
XX      Detection and/or genetic analysis of hepatitis B virus - specifically
PT      genotype, preCore mutations, vaccine escape mutations and RT gene
PT      mutations selected by treatment with drugs.
XX
XX      Claim 5; Fig 1; 80pp; English.
PS
XX
XX      This sequence represents a probe for the RT pol region of hepatitis b
CC      virus (HBV). This sequence can be used in the method of the invention for
CC      detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.
CC      The method comprises: (a) optionally releasing, isolating or
CC      concentrating polynucleic acids (I) in the sample, and amplifying the
CC      relevant part of a suitable HBV gene in the sample with at least 1
CC      suitable primer pair; (b) hybridising (I) with a combination of at least
CC      2 nucleotide probes, which are applied to known locations on a solid
CC      support and hybridise specifically to mutant target sequences chosen from
CC      the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV
CC      genotype specific target sequences, or their complements or U for T
CC      homologues; (c) detecting the hybrids formed in step (b), and inferring
CC      the HBV genotype and/or mutants present in the sample from the
CC      differential hybridisation signal(s). The composition can be used to
CC      diagnose and/or monitor HBV mutants and/or genotypes in a sample,
CC      specifically genotype, preCore mutations, vaccine escape mutations and RT
CC      gene mutations selected by treatment with drugs, e.g. lamivudine and
CC      penciclovir. (Updated on 27-AUG-2003 to correct OS field.)
XX
XX      Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match      0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      728 GCCAGGAGAAACAGA 742
DB      18 GCCAAGAGAAACAGA 4

RESULT 323
AAV14106/c
ID      AAV14106 standard; DNA; 18 BP.
XX
XX      AAV14106;
AC
XX
DT      27-AUG-2003 (revised)
DT      19-MAY-1998 (first entry)
XX
XX      Probe HBPz272 for RT pol region of HBV.
XX
XX      Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
KW      preCore region; HBsAg region; genotype specific target;
KW      mutation detection; ss.
XX
XX      Synthetic.
OS
OS      Hepatitis B virus.
XX
XX      WO9740193-A2.
PN
XX
XX      30-OCT-1997.
PD
XX
XX      21-APR-1997; 97WO-EP002002.
PF
XX
XX      19-APR-1996; 96EP-00870053.
PR
XX
XX      (INNO-) INNOGENETICS NV.
PA
XX
XX      Stuyver L, Rossau R, Maertens G;
PI
XX
XX      WPI; 1997-535867/49.
DR
XX
XX      Detection and/or genetic analysis of hepatitis B virus - specifically
PT      genotype, preCore mutations, vaccine escape mutations and RT gene
PT      mutations selected by treatment with drugs.
XX
XX      Claim 5; Fig 1; 80pp; English.
PS
XX
XX      This sequence represents a probe for the RT pol region of hepatitis b
CC      virus (HBV). This sequence can be used in the method of the invention for
CC      detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.
CC      The method comprises: (a) optionally releasing, isolating or
CC      concentrating polynucleic acids (I) in the sample, and amplifying the
CC      relevant part of a suitable HBV gene in the sample with at least 1
CC      suitable primer pair; (b) hybridising (I) with a combination of at least
CC      2 nucleotide probes, which are applied to known locations on a solid
CC      support and hybridise specifically to mutant target sequences chosen from
CC      the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV
CC      genotype specific target sequences, or their complements or U for T
CC      homologues; (c) detecting the hybrids formed in step (b), and inferring
CC      the HBV genotype and/or mutants present in the sample from the
CC      differential hybridisation signal(s). The composition can be used to
CC      diagnose and/or monitor HBV mutants and/or genotypes in a sample,
CC      specifically genotype, preCore mutations, vaccine escape mutations and RT
CC      gene mutations selected by treatment with drugs, e.g. lamivudine and
CC      penciclovir. (Updated on 27-AUG-2003 to correct OS field.)
XX
XX      Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match      0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      728 GCCAGGAGAAACAGA 742
DB      18 GCCAAGAGAAACAGA 4

RESULT 323
AAV14106/c
ID      AAV14106 standard; DNA; 18 BP.
XX
XX      AAV14106;
AC
XX
DT      27-AUG-2003 (revised)
DT      19-MAY-1998 (first entry)
XX
XX      Probe HBPz272 for RT pol region of HBV.
XX
XX      Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
KW      preCore region; HBsAg region; genotype specific target;
KW      mutation detection; ss.
XX
XX      Synthetic.
OS
OS      Hepatitis B virus.
XX
XX      WO9740193-A2.
PN
XX
XX      30-OCT-1997.
PD
XX
XX      21-APR-1997; 97WO-EP002002.
PF
XX
XX      19-APR-1996; 96EP-00870053.
PR
XX
XX      (INNO-) INNOGENETICS NV.
PA
XX
XX      Stuyver L, Rossau R, Maertens G;
PI
XX
XX      WPI; 1997-535867/49.
DR
XX
XX      Detection and/or genetic analysis of hepatitis B virus - specifically
PT      genotype, preCore mutations, vaccine escape mutations and RT gene
PT      mutations selected by treatment with drugs.
XX
XX      Claim 5; Fig 1; 80pp; English.
PS
XX
XX      This sequence represents a probe for the RT pol region of hepatitis b
CC      virus (HBV). This sequence can be used in the method of the invention for
CC      detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.
CC      The method comprises: (a) optionally releasing, isolating or
CC      concentrating polynucleic acids (I) in the sample, and amplifying the
CC      relevant part of a suitable HBV gene in the sample with at least 1
CC      suitable primer pair; (b) hybridising (I) with a combination of at least
CC      2 nucleotide probes, which are applied to known locations on a solid
CC      support and hybridise specifically to mutant target sequences chosen from
CC      the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV
CC      genotype specific target sequences, or their complements or U for T
CC      homologues; (c) detecting the hybrids formed in step (b), and inferring
CC      the HBV genotype and/or mutants present in the sample from the
CC      differential hybridisation signal(s). The composition can be used to
CC      diagnose and/or monitor HBV mutants and/or genotypes in a sample,
CC      specifically genotype, preCore mutations, vaccine escape mutations and RT
CC      gene mutations selected by treatment with drugs, e.g. lamivudine and
CC      penciclovir. (Updated on 27-AUG-2003 to correct OS field.)
XX
XX      Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match      0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      728 GCCAGGAGAAACAGA 742
DB      18 GCCAAGAGAAACAGA 4

RESULT 324
AAV56800/c
ID      AAV56800 standard; DNA; 18 BP.
XX
XX      AAV56800;
AC
XX
DT      14-JUL-1999 (first entry)
DT      19-MAY-1998 (first entry)
XX
XX      WO9922023 probe 36.
DE
XX
XX      Microorganism; hybridisation; probe; identification; detection; bacteria;
KW      milk; water; automated; ss.
XX
XX      Synthetic.
OS
OS      WO9922023-A2.
PN
XX
XX      06-MAY-1999.
PD
XX
XX      29-OCT-1998; 98WO-EP006863.
PF
XX
XX      29-OCT-1997; 97DE-01047731.
PR
XX
XX      (MIRA-) MIRA DIAGNOSTICA GMBH.
PA
XX
XX      Leiser M, Epping B;
PI
XX
XX      WPI; 1999-303024/25.
DR
XX
XX      Identifying specific microorganisms present in a mixture.
PT
XX
XX      Claim 1; Page 9; 19pp; German.
PS
XX
XX      This invention describes the detection of specific microorganisms from
CC      various taxa, in a sample containing several different microorganisms by
CC      nucleic acid hybridization, using as probes, 62 specific oligonucleotides
CC      (represented in AAX56765-X56826) with at least one oligonucleotide being
CC      able to hybridize to each microorganism. The method is useful for
CC      detecting and identifying bacteria in milk and water. The method, which
CC      may be fully automated, allows simultaneous detection and unequivocal
CC      identification of bacteria from different taxa
XX
XX      Sequence 18 BP; 2 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1018 AAAGAGGGGAGCTT 1032
DB      15 AAAGAGGGGAGCTT 1

RESULT 325
AAZ22160
ID      AAZ22160 standard; DNA; 18 BP.
XX
XX      AAZ22160;
AC
XX
DT      26-NOV-1999 (first entry)
DT
XX
XX      Human c-IAP-1 mRNA inhibiting antisense oligo ISIS #23342.
DE
XX
XX      Cellular Inhibitor of Apoptosis-1; antisense; diagnostic; therapeutic;
KW      c-IAP-1; prophylaxis; infection; inflammation; tumor formation; ss.
XX
XX      Synthetic.
OS
XX      Homo sapiens.
XX
```

PN US958772-A.
 XX
 PD 28-SEP-1999.
 XX
 PF 03-DEC-1998; 98US-00205204.
 XX
 PR 03-DEC-1998; 98US-00205204.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Bennett CF, Cowsett LM, Ackermann EJ;
 XX
 XX WPI; 1999-561047/47.
 XX
 XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-1
 PT useful for e.g. diagnostics, therapeutics, and as research reagents.
 XX
 XX Claim 3; Col 38; 32pp; English.
 XX
 CC The invention provides antisense compounds of 8-30 nucleotides that
 CC inhibit the expression of human Cellular Inhibitor of Apoptosis-1 (c-IAP-
 CC 1). The antisense compounds may be used for diagnostics, therapeutics
 CC (for modulating the expression of c-IAP-1), prophylaxis (e.g. to prevent
 CC or delay infection, inflammation, or tumor formation), as research
 CC reagents (e.g. to distinguish between members of a biological pathway)
 CC and in kits. Sequences AA22150-189 represent phosphorothioate
 CC oligonucleotides used for antisense inhibition of cellular inhibitor of
 CC apoptosis-1
 XX
 XX Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 3.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 761 ATGCAGGTTCTTTC 775
 DB 4 ATGCAGGTTCTTTC 18
 RESULT 326
 AAZ70729
 ID AAZ70729 standard; DNA; 18 BP.
 XX
 AC AAZ70729;
 XX
 DT 10-SEP-2001 (first entry)
 DE
 DE Human biallelic marker upstream amplification primer SEQ ID NO:5085.
 XX
 XX Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX WO9954500-A2.
 PN
 XX
 PD 28-OCT-1999.
 XX
 XX 21-APR-1999; 99WO-IB000822.
 PF
 XX
 XX 21-APR-1998; 98US-0082614P.
 PR
 XX 23-NOV-1998; 98US-0109732P.
 PR
 XX (GEST) GENSET.
 PA
 XX Cohen D, Blumenfeld M, Chumakov I;
 PI
 XX WPI; 2000-013267/01.
 DR
 XX

PT Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.
 XX
 PS Claim 8; Page 1315; 2745pp; English.
 XX
 CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention
 XX
 XX Sequence 18 BP; 4 A; 8 C; 0 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 3.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 976 TCCAGGCTCTACTCC 990
 DB 4 TCCAAACTCTACTCC 18
 RESULT 327
 ABZ75036/C
 ID ABZ75036 standard; DNA; 18 BP.
 XX
 AC ABZ75036;
 XX
 DT 10-MAY-2003 (first entry)
 DE
 DE Mus musculus/Mus spretus STK15 reverse PCR primer, SEQ ID NO:32.
 XX
 XX Serine/threonine kinase 15; STK15; STK6; Aurora2; cell cycle;
 KW centrosome-associated kinase; cancer susceptibility;
 KW single nucleotide polymorphism; SNP; genetic diagnosis; prognosis;
 KW detection; diagnosis; cancer; malignant astrocytoma; glioblastoma;
 KW medulloblastoma; gastric cancer; colorectal cancer; colorectal adenoma;
 KW acute myelogenous leukaemia; lung cancer; renal cancer; leukaemia; mouse;
 KW breast cancer; prostate cancer; endometrial cancer; neuroblastoma; mouse;
 KW murine; PCR; primer; ss.
 XX
 OS Mus musculus.
 OS Mus spretus.
 XX
 XX WO2003012046-A2.
 PN
 XX 13-FEB-2003.
 PD
 XX
 XX 29-JUL-2002; 2002WO-US024115.
 PF
 XX
 XX 27-JUL-2001; 2001US-0308911P.
 PR
 XX 28-NOV-2001; 2001US-0334146P.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA
 XX Toland AB, Balmain A;
 PI
 XX WPI; 2003-239517/23.
 DR
 XX
 XX Determining cancer susceptibility in a human subject comprises
 PT identifying in a nucleic acid sample from the subject, a nucleotide
 PT occurrence of a single polynucleotide polymorphism (SNP) of the STK15
 PT gene.

```

XX PS Example 2; Page 57; 92pp; English.
XX CC
XX CC The invention relates to a method for determining cancer susceptibility
XX CC in a human patient. The method involves determining the identity of the
XX CC nucleotide at position 457 of the serine/threonine kinase 15 (STK15) DNA
XX CC (ABZ75005). This site is a T/A single nucleotide polymorphism (SNP) in
XX CC the coding region of the DNA, resulting in either a Phe or Ile residue at
XX CC position 31 in the corresponding STK15 protein (ABP97366). The A457
XX CC (Ile31) allele (see ABZ75006, ABP97367) is associated with an increased
XX CC cancer susceptibility. STK15 (also known as STK6 and Aurora2) is a
XX CC centrosome-associated kinase that is highly expressed at the G2 and M
XX CC phase of the cell cycle, and its gene is located on chromosome 20. The
XX CC method of the invention are useful for determining cancer susceptibility
XX CC and for prognosing, detecting and/or diagnosing cancers such as malignant
XX CC astrocytoma, glioblastoma, medulloblastoma, gastric cancer, colorectal
XX CC cancer, colorectal adenoma, acute myelogenous leukemia, lung cancer,
XX CC renal cancer, leukaemia, breast cancer, prostate cancer, endometrial
XX CC cancer and neuroblastoma. Sequences ABZ75035-ABZ75038 represent Mus
XX CC musculus/Mus spretus STK15 (STK6) probes and PCR primers used in
XX CC expression and amplification analysis of STK15 in an exemplification of
XX CC the invention
XX CC
XX CC Sequence 18 BP; 3 A; 3 C; 10 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1093 ACCCCACCTGGGC 1107
DB 15 ACCCTACCTGGGC 1

RESULT 328
ACC79763/C
ID ACC79763 standard; DNA; 18 BP.
XX AC ACC79763;
XX DT 29-AUG-2003 (first entry)
XX DE Mouse PDGFR-beta antisense oligonucleotide M-AS-PT-ODN SEQ ID NO:19.
XX KW PDGFR-beta; platelet derived growth factor receptor beta; nanoparticle;
XX KW delivery; encapsulated molecule; cytostatic; antimicrobial; gene therapy;
XX KW sustained delivery; cell proliferation disorder; infectious disease;
XX KW genetic defect; aberrant gene regulation; antisense oligonucleotide;
XX KW phosphorothioate; ss.
XX OS Mus musculus.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..4 /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
FT modified_base 16..18 /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
XX PN WO2003048298-A2.
XX XX
XX PD 12-JUN-2003.
XX XX
XX PF 05-DEC-2002; 2002WO-IL000985.
XX XX
XX PR 05-DEC-2001; 2001US-0335837P.
XX XX
XX PA (YISS ) YISSUM RES DEV CO HEBREW UNIV JERUSALEM.
XX XX

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PI Golomb G, Sacks H, Najareh Y;
XX WPI; 2003-523294/49.
XX Nanoparticles for sustained delivery of encapsulated molecule into a
PT living cell, comprising encapsulation media with biodegradable polymer,
PT and isolated nucleic acid homolog sequence encapsulated with medium.
XX Claim 18; Page 32; 97pp; English.
XX The present invention describes nanoparticles (I) capable of delivery of
CC an encapsulated molecule into a living cell, comprising an encapsulation
CC media (EM) including a biodegradable polymer, and an isolated nucleic
CC acid homolog sequence (II) encapsulated with EM, where the
CC nanoparticles are capable of releasing (II) over an extended period of
CC time. (I) have cytostatic and antimicrobial activities, and can be used
CC in gene therapy. (I) can be used for sustained delivery and release of a
CC nucleic acid homolog within a subject, by encapsulating a nucleic acid
CC homolog within (I), and introducing (I) into the subject. (I) can also be
CC used for treating a medical condition of a subject by sustained delivery
CC of nucleic acid homolog, by encapsulating an isolated nucleic acid
CC homolog sequence designed to alleviate symptoms of the medical
CC condition within EM, so that nanoparticles are formed, and delivering the
CC nanoparticles into the subject, where the isolated nucleic acid homolog
CC sequence is released over an extended period of time. A pharmaceutical
CC composition comprising (I) can be used for treating a medical condition
CC including cell proliferation disorder, an infectious disease, a genetic
CC defect and aberrant gene regulation. The nanoparticles are capable of
CC introducing the nucleic acid into the cell very efficiently. The present
CC sequence represents a partial phosphorothioate antisense oligonucleotide
CC for platelet derived growth factor receptor beta (PDGFR-beta), which is
CC used in an example from the present invention
XX CC
XX CC Sequence 18 BP; 5 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1096 CCCACCTGGGCTTC 1110
DB 17 CCCACCTGGGCTTC 3

RESULT 329
ADB54870
ID ADB54870 standard; DNA; 18 BP.
XX AC ADB54870;
XX DT 04-DEC-2003 (first entry)
XX DE Hybridisation oligonucleotide 406 used to analyse genomic DNA region.
XX KW colon cell proliferative disorder; non methylated CpG dinucleotide;
XX KW cytostatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;
XX KW probe.
XX OS Unidentified.
XX PN WO2003072821-A2.
XX PD 04-SEP-2003.
XX XX
XX PF 27-FEB-2003; 2003WO-BP002035.
XX XX
XX PR 27-FEB-2002; 2002EP-00004551.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;
XX PI Rujan T, Schmitt A;
XX XX

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DR WPI; 2003-731620/69.
XX Detecting and differentiating between colon cell proliferative disorders
PT associated with a gene or its regulatory regions comprises contacting a
PT target nucleic acid in a biological sample obtained from the subject with
PT a reagent.
XX
PS Claim 36; Page 35; 74pp; English.
XX
CC The invention relates to a novel method for detecting and differentiating
CC between colon cell proliferative disorders associated with at least one
CC gene or its regulatory regions. The method comprises contacting a target
CC nucleic acid in a biological sample obtained from the subject with at
CC least one reagent or a series of reagents, where the reagent or series of
CC reagents, distinguishes between methylated and non methylated CpG
CC dinucleotides within the target nucleic acid. The molecules of the
CC invention demonstrate cytostatic activity whilst the method may be useful
CC for detecting and differentiating between colon cell proliferative
CC disorders, including cancers such as colon adenoma and colon carcinoma.
CC The PNA (peptide nucleic acid)-oligomers are useful as probes for
CC determining cytosine methylation state or single nucleotide
CC polymorphisms. The current sequence is that of the hybridisation
CC oligonucleotide of the invention which was used to analyse the genomic
CC DNA region.
XX
SQ Sequence 18 BP; 3 A; 0 C; 6 G; 9 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 992 TTGTTTGGGAAAT 1006
|||||
DB 2 TTGTTGTTGGAAAT 16
RESULT 330
ADE43557/c
ID ADE43557 standard; DNA; 18 BP.
XX
AC ADE43557;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human IDE sequencing primer, SEQ ID 162.
XX
KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;
KW Alzheimer's disease; neuroprotective; nontropic; gene therapy;
KW Chromosome 10; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003054143-A2.
XX
PD 03-JUL-2003.
XX
PF 25-OCT-2002; 2002WO-US034679.
XX
PR 25-OCT-2001; 2001US-0339525P.
PR 08-NOV-2001; 2001US-0336929P.
PR 08-NOV-2001; 2001US-0338010P.
PR 09-NOV-2001; 2001US-0338363P.
PR 04-DEC-2001; 2001US-0337052P.
PR 28-MAR-2002; 2002US-0368919P.
XX
PA (NEUR-) NEUROGENETICS INC.
PA (GEO) GEN HOSPITAL CORP.
XX
PI Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;
PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;
XX WPI; 2003-559131/52.
XX
PT Determining a predisposition for or the occurrence of neurodegenerative
PT disease, e.g. Alzheimer's disease by detecting in a target nucleic acid
PT the presence or absence of an allelic variant of one or more polymorphic
PT regions.
XX
PS Example 3; Page 276; 848pp; English.
XX
CC The present invention relates to a method (M1) for determining a
CC predisposition for or the occurrence of neurodegenerative disease in a
CC subject. The method comprises detecting in a target nucleic acid obtained
CC from the subject the presence or absence of an allelic variant of one or
CC more polymorphic regions of one or more genes selected from uPA
CC (urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-
CC degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid
CC lyase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the
CC presence of at least one of the allelic variant of one or more
CC polymorphic regions is indicative of a predisposition for or the
CC occurrence of neurodegenerative disease. The genes are all located on
CC chromosome 10. M1 is useful for determining a predisposition for or the
CC occurrence of, and for treating neurodegenerative disease, particularly
CC Alzheimer's disease. The present sequence is a PCR primer, which was used
CC in the method of the invention.
XX
SQ Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 812 AGAAAGCCTGGAGT 826
|||||
DB 16 AGAGAGCCTGGAGT 2
RESULT 331
AAQ20002/c
ID AAQ20002 standard; DNA; 19 BP.
XX
AC AAQ20002;
XX
DT 01-APR-1992 (first entry)
XX
DE Oligomer Az-A able to covalently cross-link to target DNA.
XX
KW deoxyribonucleic acid; major groove; ethanocino group; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "N4N4-ethanocytosine"
XX
PN WO9118997-A.
XX
PD 12-DEC-1991.
XX
PF 25-MAY-1990; 90US-00529346.
XX
PR 25-MAY-1990; 90US-00529346.
PR 14-JAN-1991; 91US-00640654.
XX
PA (GILE-) GILEAD SCIE INC.
XX
PI Matteucci MD, Krawczyk S;
XX WPI; 1992-007480/01.
XX
PT New sequence-specific non-photo-activated crosslinking agents - bind to
PT the major groove of duplex DNA and are esp. useful for treating latent
PT infections e.g. HIV.
XX

PS Example 1; Page 18; 42pp; English.

XX Oligomer Az-A was designed to associate specifically with a test cassette. It was found to covalently bind to guanine in the target sequence via the N4N4-ethanocytosine residue. Az-A was tested with a second oligomer (Az-B - see AAZ020003) and both were found to specifically recognise the appropriate cassette differing only in one nucleotide out of 19

XX Sequence 19 BP; 0 A; 8 C; 0 G; 11 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1015 GAAAGAGAGGGGAG 1029
Db 16 GAAAGAGAGGGGAG 2

RESULT 332
AAZ09895/c
ID AAZ09895 standard; DNA; 19 BP.
XX AC
XX AAX09895;
XX DT 24-MAR-1999 (first entry)
XX DE Human biallelic polymorphic marker downstream primer #201.
XX KW Polymorphism; biallelic; human; forensic; paternity testing; disease;
XX KW detection; phenotypic typing; characteristic; infection; hereditary;
XX KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;
XX KW treatment; marker; primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9820165-A2.
XX XX 14-MAY-1998.
XX PF 05-NOV-1997; 97WO-US020313.
XX PR 06-NOV-1996; 96US-0030455P.
XX PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
XX PI Lander ES, Wang D, Hudson T;
XX WPI; 1998-286974/25.
XX New isolated nucleic acid segments from the human genome - used for
XX determining polymorphic forms for use in e.g. forensics, paternity
XX testing or phenotypic typing for disease.
XX Claim 16; Page 69; 310pp; English.

XX AAX09121-X10268 are allele-specific oligonucleotide primers used in the
XX isolation of various biallelic polymorphic markers found in the human
XX genome (represented in AAX10269-X12937). These primers can be used in a
XX method for determining polymorphic forms in an individual for use in e.g.
XX forensics, paternity testing or for phenotypic typing for diseases such
XX as agammaglobulinemia, diabetes insipidus, Leach-Nyhan syndrome, muscular
XX dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
XX hypercholesterolemia, polycystic kidney disease, hereditary
XX spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
XX haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
XX syndrome, osteogenesis imperfecta, acute intermittent porphyria,
XX autoimmune diseases, inflammation, cancer, diseases of the nervous
XX system, infection by pathogenic microorganisms, and characteristics such
XX as longevity, appearance (e.g. baldness, obesity), strength, speed,
XX endurance, fertility, and susceptibility or receptivity to particular

CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC segments can also be used to produce medicaments for the treatment or
CC prophylaxis of such diseases

XX Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1012 CCTGAAAAGAGGGG 1026
Db 16 CCTGAAAAGAGGGG 2

RESULT 333
AAZ72906/c
ID AAZ72906 standard; DNA; 19 BP.
XX AC
XX AAZ72906;
XX DT 10-SEP-2001 (first entry)
XX DE Human biallelic marker upstream amplification primer SEQ ID NO:7262.
XX KW Human genome; biallelic marker; high density disequilibrium map;
XX KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX KW haplotyping; hybridisation; identification; characterisation;
XX KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX KW diagnosis; ss.
XX OS Homo sapiens.
XX PN WO9954500-A2.
XX XX 28-OCT-1999.
XX PF 21-APR-1999; 99WO-IB000822.
XX PR 21-APR-1998; 98US-0082614P.
XX PR 23-NOV-1998; 98US-0109732P.
XX PA (GEST) GENSET.
XX PI Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX Claim 9; Page 1779; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX Sequence 19 BP; 1 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;

```

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 862 AAGGCACTGAGGAC 876
Db 16 AAGGCACTGAGAAC 2
RESULT 334
AAD09709
ID AAD09709 standard; DNA; 19 BP.
XX
AC AAD09709;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cryptosporidium parvum S60 gene sequencing PCR primer, S15.R11.
XX
KW S60 antigen; protozoa; vaccine; intestinal infection; diarrhoea;
KW AIDS; Acquired Immune Deficiency Syndrome; cancer; PCR primer; ss.
XX
OS Cryptosporidium parvum.
XX
PN WO200140248-A1.
XX
PD 07-JUN-2001.
XX
PF 01-DEC-2000; 2000WO-AU001492.
XX
PR 01-DEC-1999; 99AU-00004400.
XX
PA (MACQ-) MACQUARIE RES LTD.
XX
PI Winter G, Slade MB, Williams KL, Gooley AA;
XX
DR WPI; 2001-408274/43.
XX
PT Novel nucleic acids encoding antigenic polypeptides of Cryptosporidium
PT useful in antigenic preparations for immunizing animals against
PT Cryptosporidium.
XX
PS Example; Fig 6; 72pp; English.
XX
CC The invention relates to Cryptosporidium parvum S60 potential vaccine
CC antigen and its corresponding DNA molecule. S60 antigens are used in
CC vaccine preparations for immunising animals, preferably human, against
CC Cryptosporidium. The S60 protein is processed into two glycoproteins S15
CC and S45. This S45 and S15 glycoproteins behave as a single membrane
CC glycoprotein S60. S60 vaccine antigen is used for treating intestinal
CC infections such as diarrhoea in immunosuppressed patients e.g., AIDS
CC (Acquired Immune Deficiency Syndrome), cancer patients and recipients of
CC transplants. The present DNA sequence is PCR primer which is used for
CC sequencing Cryptosporidium parvum S60 gene
XX
SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1068 AAGCTTCAGTCCAC 1082
Db 5 AAGCTTCAGTACCAC 19
RESULT 335
AAF62156/C
ID AAF62156 standard; DNA; 19 BP.
XX
AC AAF62156;
XX
DT 15-MAY-2001 (first entry)
XX
DE Lam K U primer SEQ ID 11.

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```

XX Microorganism detection; PCR primer; ss; lambda receptor.
XX Escherichia coli.
XX WO200112853-A1.
XX 22-FEB-2001.
XX 11-AUG-2000; 2000WO-US022029.
XX 13-AUG-1999; 99US-0149365P.
XX 08-AUG-2000; 2000US-00634960.
XX (COBB/) CORBETT C W.
XX (KARL/) KARLSEN F.
XX Karlsen F;
XX WPI; 2001-211234/21.
XX Detecting microorganisms such as Escherichia coli, Enterococcus
XX faecalis/faecium by PCR amplification of E.coli specific lamB gene and
XX E.faecalis/faecium transposase gene Tni546 using novel oligonucleotides.
XX Claim 10; Page 11; 56pp; English.
XX This invention relates to a method for the detection of a microorganism
XX in a sample. The method involves selecting a target DNA sequence in a
XX target gene of a microorganism and detecting its presence in a sample
XX using PCR amplification. The method is useful for detecting bacteria e.g.
XX E.coli, E.faecalis/faecium in a liquid or liquefied sample by PCR. The
XX present sequence represents a PCR primer used in the method of the
XX invention for the detection of Escherichia coli. The primer is based on
XX the sequence of the E. coli lambda receptor gene
XX SQ Sequence 19 BP; 4 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1227 CCTTGGCAGAGCCT 1241
Db 19 CCTTGGCAGAGCCT 5
RESULT 336
ABA91977
ID ABA91977 standard; DNA; 19 BP.
XX
AC ABA91977;
XX
DT 23-MAY-2002 (first entry)
XX
DE Single nucleotide polymorphism probe BAK/T.
XX
KW Single nucleotide polymorphism; SNP; detection; Taqman; assay; quencher;
KW hybridisation; human; probe; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "dTMR-thymidine"
FT modified_base 19
FT /*tag= b
FT /mod_base= OTHER
FT /note= "nitrothiazole blue-cytidine"
XX

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CC (water or soil), clinical samples (sputum, biopsies, urine etc.), in
 CC bathing and drinking water and in foods, pharmaceuticals and cosmetics,
 CC by in situ hybridisation. The probes combine the advantages of
 CC fluorescent in situ hybridisation with those of culture methods. Only a
 CC relatively short culture step is required; analysis takes 24-48 hours
 CC (contrast many days for conventional methods) and all relevant bacteria
 CC can be tested simultaneously. The oligonucleotides can differentiate
 CC between species of the same genus and are easy to use, allowing simple
 CC analysis of a large number of samples. ABX94532-ABX94578 represent the
 CC oligonucleotide probes described in the invention
 XX
 SQ Sequence 19 BP; 1 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 19;
 Best Local Similarity 93.3%; Pred. NO. 4.1e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1010 CACCTGAAAAGAGG 1024
 |||||
 DB 15 CACCGAAAAGAGG 1
 RESULT 341
 AAV39339/c
 ID AAV39339 standard; cDNA; 18 BP.
 XX
 AC AAV39339;
 XX
 DT 16-SEP-1998 (first entry)
 XX
 DE Human RAD54 mutation detecting PCR primer SEQ ID NO:47.
 XX
 KW Human; RAD54; cancer; xeroderma pigmentosum; Bloom syndrome;
 KW Werner's syndrome; ATR-X; diagnosis; detection; SNF2 superfamily;
 KW X-linked mental retardation with alpha-thalassemia syndrome; tumour;
 KW gene therapy; PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX EP844305-A2.
 XX
 PD 27-MAY-1998.
 XX
 XX 10-NOV-1997; 97EP-00308998.
 XX
 XX 13-NOV-1996; 96US-0030676P.
 XX
 XX (SMIK) SMITHKLINE BEECHAM CORP.
 XX (UYJE-) UNIV JEFFERSON THOMAS.
 XX
 PI Croce CM, Fishel RA, Rasio D, Robbins DJ;
 XX
 DR WPI; 1998-274189/25.
 XX
 XX Human hRAD54 DNA and polypeptide - and agonists, antibodies, antagonists,
 XX etc.
 XX
 PS Claim 18; Page 49; 64pp; English.
 XX
 CC The present sequence represents a PCR primer for use in a method of the
 CC invention for determining the genetic predisposition to cancer in an
 CC individual by detecting hRAD54 mutations in a sample. hRAD54 is a gene
 CC thought to be present in tumours that display allelic imbalance at Ip32,
 CC the chromosomal band identified as one of four minimal regions of
 CC chromosome 1 deletion in breast carcinomas. hRAD54 is useful for
 CC production of proteins, inter alia, that have been identified as novel
 CC hRAD54 by homology between the amino acid sequence given in AAW62186 and
 CC known amino acid sequences such as yeast RAD54. hRAD54 proteins are used
 CC in the treatment of cancer, including Xeroderma Pigmentosum and Bloom
 CC syndrome, Werner's syndromes and X-linked mental retardation with alpha-
 CC thalassemia syndrome and breast cancer. hRAD54 polynucleotides are also
 CC useful for detecting complementary nucleotides for use as a diagnostic

CC agent, especially useful for diagnosis of disease or susceptibility to
 CC diseases. hRAD54 polynucleotide, proteins, agonists and antagonists which
 CC are proteins are useful in gene therapy
 XX
 SQ Sequence 18 BP; 5 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.2; DB 1; Length 18;
 Best Local Similarity 83.3%; Pred. NO. 3.9e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 853 GAGATGTTAAGGCACCT 870
 |||||
 DB 18 GATATGCTTAGGCACCT 1
 RESULT 342
 AAZ17892
 ID AAZ17892 standard; DNA; 18 BP.
 XX
 AC AAZ17892;
 XX
 DT 11-OCT-1999 (first entry)
 XX
 DE RT-PCR primer specific for homeobox gene groups.
 XX
 KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
 KW primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX WO9934016-A2.
 XX
 PD 08-JUL-1999.
 XX
 XX 28-DEC-1998; 98WO-IL000625.
 XX
 XX 29-DEC-1997; 97IL-00122793.
 XX
 XX 16-OCT-1998; 98IL-00126627.
 XX
 XX (GENE-) GENENA LTD.
 XX
 XX Vidar B;
 XX
 XX WPI; 1999-419113/35.
 XX
 XX Identifying and characterizing cells by comparing the pattern of gene
 XX expression in a selected gene family.
 XX
 XX Claim 4; Page 30; 102pp; English.
 XX
 CC The invention provides a new method for identifying and characterising
 CC cells. The method for determining the genetic proximity of a first cell
 CC and a second cell comprises: (a) obtaining the first cell and the second
 CC cell; (b) determining in the first cell and the second cell the pattern
 CC of expression of genes in a selected gene family; and (c) calculating a
 CC proximity index using a specified formula. The methods can be used for
 CC characterising cells, e.g. for determining the origin of a cell, its
 CC genetic status, whether it carries a genetic defect, or whether it is
 CC transformed. They can be used for detecting a selected genetic defect in
 CC an individual, e.g. a fetus. They can also be used for determining the
 CC effect of a selected treatment on a test cell. They can also be used for
 CC obtaining cells capable of expressing an homeobox related desired
 CC property. The method uses reverse transcriptase polymerase chain reaction
 CC (RT-PCR) for determining the pattern of gene expression in a selected
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used
 CC in the RT-PCR reactions to determine the pattern of gene expression. The
 CC gene family can be selected from a set of homeobox genes, kinase genes,
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor
 CC superfamily genes or cadherin superfamily genes
 XX

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SQ Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. NO. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1093 ACCCCACCTGGGCTTC 1110
Db 1 AGCCCGAGCTGGGTTTC 18

RESULT 343
AAZ17976
ID AAZ17976 standard; DNA; 18 BP.
XX
AC AAZ17976;
XX
DT 11-OCT-1999 (first entry)
XX
DE Homeobox conserved region OCT specific primer.
XX
KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
PD 08-JUL-1999.
XX
PF 28-DEC-1998; 98WO-IL000625.
XX
PR 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
PA (GENE-) GENENA LTD.
XX
PI Vider B;
XX
WPI; 1999-419113/35.
XX
Identifying and characterizing cells by comparing the pattern of gene
expression in a selected gene family.
XX
Claim 4; Page 34; 102pp; English.
XX
The invention provides a new method for identifying and characterising
cells. The method for determining the genetic proximity of a first cell
and a second cell comprises: (a) obtaining the first cell and the second
cell; (b) determining in the first cell and the second cell the pattern
of expression of genes in a selected gene family; and (c) calculating a
proximity index using a specified formula. The methods can be used for
characterising cells, e.g. for determining the origin of a cell, its
genetic status, whether it carries a genetic defect, or whether it is
transformed. They can be used for detecting a selected genetic defect in
an individual, e.g. a fetus. They can also be used for determining the
effect of a selected treatment on a test cell. They can also be used for
obtaining cells capable of expressing an homeobox related desired
property. The method uses reverse transcriptase polymerase chain reaction
(RT-PCR) for determining the pattern of gene expression in a selected
gene family. Sequences AAZ17803-Z18342 represent primers that can be used
in the RT-PCR reactions to determine the pattern of gene expression. The
gene family can be selected from a set of homeobox genes, kinase genes,
protein phosphatase genes, P450 enzyme genes, steroid receptor
superfamily genes or cadherin superfamily genes
XX
Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. NO. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

SQ Sequence 18 BP; 1 A; 6 C; 0 G; 11 T; 0 U; 0 Other;
Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. NO. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 TTTATCCCTCTCTTCAT 944
Db 1 TTTCTCCCTTCTCTTCAT 18

RESULT 345
AAZ40877/c
ID AAZ40877 standard; DNA; 18 BP.
XX
AC AAZ40877;
XX
DT 26-JAN-2000 (first entry)
XX
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DE Human CD40 phosphorothioate antisense oligonucleotide SEQ ID NO:26.
XX
XX Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9953101-A1.
XX
XX 21-OCT-1999.
XX
XX 13-APR-1999; 99WO-US008268.
XX
XX 13-APR-1998; 98US-0081483P.
XX
XX 28-APR-1998; 98US-00067638.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasnor HM, Brooks DG;
XX Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
XX WPI; 1999-620446/53.
XX
XX Identifying compounds which modulate expression of nucleic acids, used to
XX provide compounds having defined physical, chemical or bioactive
XX properties, e.g. antisense activity.
XX
XX Example 8; Page 77; 264pp; English.
XX
XX A method has been developed of defining a set of compounds that modulate
XX the expression of a target nucleic acid (tNA) sequence via binding of the
XX compounds with the tNA sequence. The method comprises generating a
XX library of virtual compounds in silico according to defined criteria, and
XX evaluating in silico the binding of the virtual compounds with the tNA
XX according to defined criteria. Also described are: (1) a method of
XX defining a set of oligonucleotides (ONS) that modulate the expression of
XX a tNA sequence via binding of the ONS with the tNA sequence comprising
XX generating a library of virtual compounds in silico according to defined
XX criteria, and evaluating in silico the binding of the virtual ONS with
XX the tNA according to defined criteria; and (2) a method of defining a set
XX of compounds that modulate the expression of a tNA sequence via binding
XX of the compounds with the tNA. The methods can be used for the generation
XX and identification of synthetic compounds having defined physical,
XX chemical or bioactive properties. Information gathered from assays of
XX such compounds is used to identify nucleic acid sequences that are
XX tractable to a variety of nucleotide sequence-based technologies, e.g.
XX antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
XX AA52701 to AA52706, represent sequences used in the exemplification of
XX the present invention
XX
XX Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13.2; DB 1; Length 18;
XX Best Local Similarity 83.3%; Pred. No. 3.9e+02;
XX Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1006 TCGACACCTTGAAAGAG 1023
XX Db 18 TAGACACCTGGACAGAG 1
XX
XX RESULT 346
XX AAZ41069/c
XX ID AAZ41069 standard; DNA; 18 BP.
XX
XX AC AAZ41069;
XX
XX 26-JAN-2000 (first entry)
XX
XX Human ELK-1 phosphorothioate antisense oligonucleotide SEQ ID NO:221.
XX

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XX
XX Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9953101-A1.
XX
XX 21-OCT-1999.
XX
XX 13-APR-1999; 99WO-US008268.
XX
XX 13-APR-1998; 98US-0081483P.
XX
XX 28-APR-1998; 98US-00067638.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasnor HM, Brooks DG;
XX Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
XX WPI; 1999-620446/53.
XX
XX Identifying compounds which modulate expression of nucleic acids, used to
XX provide compounds having defined physical, chemical or bioactive
XX properties, e.g. antisense activity.
XX
XX Example 24; Page 104; 264pp; English.
XX
XX A method has been developed of defining a set of compounds that modulate
XX the expression of a target nucleic acid (tNA) sequence via binding of the
XX compounds with the tNA sequence. The method comprises generating a
XX library of virtual compounds in silico according to defined criteria, and
XX evaluating in silico the binding of the virtual compounds with the tNA
XX according to defined criteria. Also described are: (1) a method of
XX defining a set of oligonucleotides (ONS) that modulate the expression of
XX a tNA sequence via binding of the ONS with the tNA sequence comprising
XX generating a library of virtual compounds in silico according to defined
XX criteria, and evaluating in silico the binding of the virtual ONS with
XX the tNA according to defined criteria; and (2) a method of defining a set
XX of compounds that modulate the expression of a tNA sequence via binding
XX of the compounds with the tNA. The methods can be used for the generation
XX and identification of synthetic compounds having defined physical,
XX chemical or bioactive properties. Information gathered from assays of
XX such compounds is used to identify nucleic acid sequences that are
XX tractable to a variety of nucleotide sequence-based technologies, e.g.
XX antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
XX AA52701 to AA52706, represent sequences used in the exemplification of
XX the present invention
XX
XX Sequence 18 BP; 6 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13.2; DB 1; Length 18;
XX Best Local Similarity 83.3%; Pred. No. 3.9e+02;
XX Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1120 CCCAGTTCACCTTCACC 1137
XX Db 18 CTCATTCCACCTTCACC 1
XX
XX RESULT 347
XX AAZ09753/c
XX ID AAZ09753 standard; DNA; 18 BP.
XX
XX AC AAZ09753;
XX
XX 22-NOV-1999 (first entry)
XX
XX Human HM1.24 antigenic protein primer 20.
XX

```

KW Antigenic protein; HM1.24; splice variant; promoter; anti-rheumatic;
 KW antiarthritic; bone marrow; tumour cell; drug development; treatment;
 KW myeloma; rheumatoid arthritis; human; primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX PN WC9943803-A1.
 XX PD 02-SEP-1999.
 XX 25-FEB-1999; 99WO-JP000884.
 XX 25-FEB-1998; 98JP-00060617.
 PR 24-MAR-1998; 98JP-00093883.
 XX
 XX PA (CHUS) CHUGAI SEIYAKU KK.
 XX
 XX Ontomo T, Tsuchiya M, Koishihara Y, Koseaka M;
 PI WPI; 1999-550869/46.
 XX
 XX Genomic DNA encoding HM1.24 antigen protein as well as splicing variants,
 PT useful e.g. in development of drugs for treating myeloma and rheumatoid
 PT arthritis.
 XX
 XX Example 4; Page 76; 83pp; Japanese.
 XX
 XX This invention describes a novel human antigenic protein, HM1.24, its
 CC encoding nucleic acid, splice variants and promoter region. The products
 CC of the invention have anti-rheumatic and antiarthritic activity. The DNA
 CC of the invention is isolated from bone marrow tumour cells, which can be
 CC used to study the expression of HM1.24 antigen, promoter activity of its
 CC promoter region, and in development of drugs in treating e.g. myeloma and
 CC rheumatoid arthritis. AAZ09744-209754 represent primers used in the
 CC amplification and isolation of the human HM1.24 antigenic protein
 CC described in the invention
 XX
 XX Sequence 18 BP; 3 A; 10 C; 1 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.2; DB 1; Length 18;
 Best Local Similarity 83.3%; Pred. No. 3.9e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1020 AGAGGGGAGCTTGAGG 1037
 Db 18 AGTGGAGGAGCTTGAGG 1
 RESULT 348
 AAZ06585/C
 ID AAZ06585 standard; DNA; 18 BP.
 XX AC AAZ06585;
 XX
 XX 23-NOV-1999 (first entry)
 DT
 DE ELK-1 expression modulator #24.
 XX
 XX Human ELK-1; p62TCF; Ets domain transcription factor protein; apoptosis;
 KW expression inhibition; infection; inflammation; tumour formation;
 KW diagnosis; phosphorothioate; antisense compound; ss.
 XX
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..18
 FT /tag= a
 FT /note= "Internucleoside phosphorothioate linkages"
 FT modified_base 1..4
 FT /tag= b
 FT /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
 FT except cytosine residues which are 5-methylcytosine"
 FT

FT modified_base 15..18
 FT /tag= c
 FT /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
 FT except cytosine residues which are 5-methylcytosine"
 XX
 XX US5948680-A.
 PN 07-SEP-1999.
 XX
 XX 17-DEC-1998; 98US-00213767.
 PF
 XX 17-DEC-1998; 98US-00213767.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Baker BF, Cowsett LM;
 PI WPI; 1999-517959/43.
 XX
 XX Antisense compound useful for diagnosis, treatment and prevention of
 PT disease associated with ELK-1 expression.
 PT
 XX Claim 3; Col 38; 31pp; English.
 PS
 XX Sequences AAZ06571-206607 are antisense polynucleotides targeted to a
 CC nucleic acid molecule encoding human ELK-1 (also known as p62TCF). ELK-1
 CC is a member of the ternary complex factor subfamily of Ets-domain
 CC transcription factor proteins. The polynucleotides inhibit the expression
 CC of human ELK-1, and this sequence targets the coding region of the ELK-1
 CC RNA. Sequences AAZ06571-206607 all cause at least 30% inhibition of ELK-1
 CC expression. The antisense sequences can be used to inhibit the expression
 CC of human ELK-1 in human cells or tissues in vitro. ELK-1 uses a bipartite
 CC recognition mechanism mediated by both protein-DNA and protein-protein
 CC interactions to regulate genes by direct and indirect DNA binding and has
 CC been shown to control various signal transduction pathways and other cell
 CC functions including apoptosis. This means that antisense compounds
 CC inhibiting expression of ELK-1 can be used to treat diseases associated
 CC with its expression in animals, particularly humans and to prevent or
 CC delay infection, inflammation or tumour formation. The compounds can also
 CC be used for diagnosis, as research reagents and in kits
 XX
 XX Sequence 18 BP; 6 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.2; DB 1; Length 18;
 Best Local Similarity 83.3%; Pred. No. 3.9e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1120 CCCAGTTCACCTTCACC 1137
 Db 18 CTCATTTCACCTTCACC 1
 RESULT 349
 AAZ90740
 ID AAZ90740 standard; DNA; 18 BP.
 XX AC AAZ90740;
 XX
 XX 19-JUN-2000 (first entry)
 DT
 DE Reverse primer for amplifying human KVLQT1 exon 16.
 XX
 XX KVLQT1; KCNE1; long QT syndrome; LQT syndrome; minK protein;
 KW antiarrhythmic; gene therapy; human; PCR primer; ss.
 KW
 XX Homo sapiens.
 OS
 XX WO200006600-A1.
 PN
 XX 10-FEB-2000.
 PD
 XX 06-OCT-1998; 98WO-US017838.
 PF
 XX

```
PR 29-JUL-1998; 98US-0094477P.
PR 17-AUG-1998; 98US-00135020.
PA (UTAH) UNIV UTAH RES FOUND.
PI Keating MT, Sanguinetti MC, Splawski I;
XX WPI; 2000-195262/17.
XX
XX Mutant forms of genes encoding mink protein and KVLQT1 protein involved
PT in cardiac potassium channel formation useful for screening drugs, for
PT preventing and treating cardiac arrhythmia.
XX
XX Example 11; Page 70; 167pp; English.
XX
XX The invention relates to KVLQT1 and KCNE1 genes, associated with long QT
XX (LQT) syndrome. It provides a mink protein comprising a mutation which
XX substitutes the wild type amino acids with Leu, Asp, Ileu, His, Trp and
XX Ala or Thr at residues 74, 76, 28, 32, 98 and 127 respectively. Screening
XX KVLQT1 and KCNE1 is useful for identifying mutations for diagnosing and
XX treating LQT. The ability to predict LQT enables physicians to prevent
XX the diseases with medical therapy such as beta blocking agents and opcs
XX for better treatments. Sequences AAZ90707-Z90740 represent PCR primers
XX for amplifying human KVLQT1 exons
XX
XX Sequence 18 BP; 3 A; 12 C; 1 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1253 CCATCCCGCACCCCTTC 1270
DB 1 CCATCCCGCACCCCATC 18
RESULT 350
AAZ47710/C
ID AAZ47710 standard; DNA; 18 BP.
XX
XX AAZ47710;
XX
XX 02-MAR-2000 (first entry)
XX
XX Human CD40 antisense oligonucleotide SEQ ID NO:26.
XX
XX Human; CD40; antisense oligonucleotide; phosphorothioate; modulation;
XX expression; immune disease; inflammatory disease; immunomodulatory;
XX anti-inflammatory; anti-arthritis; anti-asthmatic; antiproliferative;
XX anticancer; immuno-suppressive; anti-psoriatic; allograft rejection;
XX hyperproliferative disease; autoimmune disease; rheumatoid arthritis;
XX inflammatory bowel disease; asthma; psoriasis; cancer; tumour; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO9957320-A1.
XX
XX 11-NOV-1999.
XX
XX 22-APR-1999; 99WO-US0008765.
XX
XX 01-MAY-1998; 98US-00071433.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowsett LM;
XX
XX WPI; 2000-062158/05.
XX
XX Antisense molecules directed against nucleic acid encoding human CD40,
XX for treating e.g. immune, inflammatory or hyperproliferative diseases.
XX
```

```
PS Claim 3; Page 43; 102pp; English.
XX
XX AAZ47685 to AAZ47768 represent phosphorothioate antisense
XX oligonucleotides targeted to human CD40, which can be used to inhibit the
XX expression of human CD40. CD40 is involved in lymphocyte activation,
XX tumour growth and/or angiogenesis. Inhibition of CD40 is used to treat or
XX prevent immune-associated diseases (specifically guest vs. host disease,
XX allograft rejection or autoimmune diseases); inflammation (specifically
XX asthma, rheumatoid arthritis, allograft rejection, inflammatory bowel
XX disease or psoriasis) or hyperproliferation (specifically cancer and
XX tumours). The antisense oligonucleotides are also useful as diagnostic
XX and research reagents. AAZ47769 represents the human CD40 nucleotide
XX sequence. AAZ47770 to AAZ47772 represent human CD40 forward and reverse
XX PCR primers, and a human CD40 PCR probe, respectively. AAZ47773 to
XX AAZ47775 represent other PCR primers and a probe used in the
XX exemplification of the present invention
XX
XX Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1006 TCGACACCTGAAAAGAG 1023
DB 18 TAGACACCTGGACACAG 1
RESULT 351
AAZ70521/C
ID AAZ70521 standard; DNA; 18 BP.
XX
XX AAZ70521;
XX
XX 10-SEP-2001 (first entry)
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:4877.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9954500-A2.
XX
XX 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.
XX
XX (GEST) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I;
XX
XX WPI; 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 8; Page 1271; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX
```

CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 18 BP; 6 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1130 CCTTCACCTCCAGCTCCA 1147
Db 18 CTTTACCTCCACCTCCA 1
RESULT 352
AAZ69754/C
ID AAZ69754 standard; DNA; 18 BP.
XX
AC AAZ69754;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:4110.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
XX WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
XX
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
PS Claim 8; Page 1107; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention

XX
SQ Sequence 18 BP; 2 A; 3 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 813 GAAAGCCTGAGCTGCAC 830
Db 18 GAAAGCCTCACTGCAC 1
RESULT 353
AAZ98970
ID AAZ98970 standard; DNA; 18 BP.
XX
AC AAZ98970;
XX
DT 06-JUN-2000 (first entry)
XX
DE Human long QT syndrome-associated KVLQT1 exon 16 reverse primer.
XX
KW KVLQT1; mutation; human; cardiac I (Ks) potassium channel; KCNE1; ss;
KW cardiac arrhythmia; electrocardiogram; long QT syndrome; gene therapy;
KW chromosome 1p15.5; PCR primer.
XX
OS Homo sapiens.
XX
XX WO200006199-A1.
XX
PD 10-FEB-2000.
XX
PF 12-MAY-1999; 99WO-US010260.
XX
PR 29-JUL-1998; 98US-0094477P.
XX
PR 17-AUG-1998; 98US-00135010.
XX
PA (UTAH) UNIV UTAH RES FOUND.
XX
PA (GENZ) GENZYME CORP.
XX
XX Keating MT, Sanguinetti MC, Curran ME, Landes GM, Connors TD;
PI Burn TC, Splawski I;
XX
XX WPI; 2000-195199/17.
XX
PT New isolated mutant KVLQT1 nucleic acids, useful for developing products
XX for the diagnosis, prevention and treatment of long QT syndrome.
XX
PS Claim 27; Page 73; 178pp; English.
XX
CC The invention relates to KVLQT1 nucleic acids which have a mutation
CC compared to wild-type KVLQT1 (AAZ98901) The KVLQT1 gene encodes a protein
CC of 676 amino acids which forms a cardiac I(Ks) potassium channel with the
CC KCNE1 protein (AAZ80563). The KVLQT1 gene contains 15 introns and encodes
CC a protein containing 6 putative transmembrane segments and a pore forming
CC region. The gene has been mapped to the chromosomal location 1p15.5. The
CC sequences AAZ98937-98970 represent primers used to PCR amplify the
CC KVLQT1 exon sequences. Mutations in the KVLQT1 or KCNE1 genes result in
CC cardiac arrhythmias observed as a prolonged QT curve in
CC electrocardiograms (long QT syndrome). The genes and proteins can be used
CC for the diagnosis of subjects with long QT syndrome. They can also be
CC used to screen for drugs which can be used for treating or preventing
CC long QT syndrome. The KVLQT1 nucleic acids can be used for gene therapy,
CC and KVLQT1 peptides can be used for peptide therapy
XX
SQ Sequence 18 BP; 3 A; 12 C; 1 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1253 CCATCCCAACCCCTTC 1270
|||||

```

Db      1 CCATCCCCAGCCCCATC 18
RESULT 354
AAC70583
ID      AAC70583 standard; DNA; 18 BP.
XX
AC      AAC70583;
XX
DT      09-FEB-2001 (first entry)
XX
DE      Single nucleotide polymorphism PCR primer #276.
XX
KW      Single nucleotide polymorphism; SNP; human; genetic disease;
KW      disease susceptibility; cardiovascular system; endocrine system;
KW      neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS      Homo sapiens.
XX
FN      WO200058519-A2.
XX
PD      05-OCT-2000.
XX
PF      30-MAR-2000; 2000WO-US008440.
XX
PR      31-MAR-1999; 99US-0127248P.
XX
(WHEAD ) WHITEHEAD INST BIOMEDICAL RES.
(AFFY-) AFFYMETRIX INC.
XX
PI      Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI      Lipshutz RJ, Patil N, Sklar P;
XX
WPI; 2000-611722/58.
XX
Nucleic acid selected from one of 106 genes comprising single nucleotide
PT      polymorphisms, allele-specific oligonucleotides to the genes are useful
PT      for phenotypic correlations, forensics, paternity testing, medicine and
PT      genetic analysis.
XX
PS      Claim 8; Fig 5; 214pp; English.
XX
CC      The present invention is concerned with a number of human single
CC      nucleotide polymorphisms (SNPs) which the inventors identified in human
CC      genes. These SNPs can be used in disease diagnosis and prediction of an
CC      individual's susceptibility to disease, in forensic and paternity testing
CC      and in genetic mapping. In particular, the SNPs of the invention can be
CC      used to diagnose susceptibility to diseases of the cardiovascular,
CC      endocrine and neurological systems, such as coronary artery disease,
CC      schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC      diseases
XX
SQ      Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1197 GGCACCCACCTATCAGG 1214
      ||||| ||||| ||||| |||||
Db      1 GGCATCACCTCTCTGGG 18

RESULT 356
AAC70529
ID      AAC70529 standard; DNA; 18 BP.
XX
AC      AAC70529;
XX
DT      09-FEB-2001 (first entry)
XX
DE      Single nucleotide polymorphism PCR primer #240.
XX
KW      Single nucleotide polymorphism; SNP; human; genetic disease;
KW      disease susceptibility; cardiovascular system; endocrine system;
KW      neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS      Homo sapiens.
XX
FN      WO200058519-A2.
XX
PD      05-OCT-2000.
XX
PF      30-MAR-2000; 2000WO-US008440.
XX
PR      31-MAR-1999; 99US-0127248P.
XX

```

```

Db      1 CCATCCCCAGCCCCATC 18
RESULT 354
AAC70583
ID      AAC70583 standard; DNA; 18 BP.
XX
AC      AAC70583;
XX
DT      09-FEB-2001 (first entry)
XX
DE      Single nucleotide polymorphism PCR primer #276.
XX
KW      Single nucleotide polymorphism; SNP; human; genetic disease;
KW      disease susceptibility; cardiovascular system; endocrine system;
KW      neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS      Homo sapiens.
XX
FN      WO200058519-A2.
XX
PD      05-OCT-2000.
XX
PF      30-MAR-2000; 2000WO-US008440.
XX
PR      31-MAR-1999; 99US-0127248P.
XX
(WHEAD ) WHITEHEAD INST BIOMEDICAL RES.
(AFFY-) AFFYMETRIX INC.
XX
PI      Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI      Lipshutz RJ, Patil N, Sklar P;
XX
WPI; 2000-611722/58.
XX
Nucleic acid selected from one of 106 genes comprising single nucleotide
PT      polymorphisms, allele-specific oligonucleotides to the genes are useful
PT      for phenotypic correlations, forensics, paternity testing, medicine and
PT      genetic analysis.
XX
PS      Claim 8; Fig 5; 214pp; English.
XX
CC      The present invention is concerned with a number of human single
CC      nucleotide polymorphisms (SNPs) which the inventors identified in human
CC      genes. These SNPs can be used in disease diagnosis and prediction of an
CC      individual's susceptibility to disease, in forensic and paternity testing
CC      and in genetic mapping. In particular, the SNPs of the invention can be
CC      used to diagnose susceptibility to diseases of the cardiovascular,
CC      endocrine and neurological systems, such as coronary artery disease,
CC      schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC      diseases
XX
SQ      Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1197 GGCACCCACCTATCAGG 1214
      ||||| ||||| ||||| |||||
Db      1 GGCATCACCTCTCTGGG 18

RESULT 355
AAC70550
ID      AAC70550 standard; DNA; 18 BP.
XX
AC      AAC70550;
XX
DT      09-FEB-2001 (first entry)
XX
DE      Single nucleotide polymorphism PCR primer #254.
XX

```


CC isolate sequences encoding the ROT protein
XX
SQ Sequence 18 BP; 4 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 998 GTGGGAATGACACCTG 1015
||||| ||| ||| |||
Db 18 GTGGGACATTGAACCTG 1
RESULT 359
ABX34382
ID ABX34382 standard; DNA; 18 BP.
XX
AC ABX34382;
XX
DT 11-FEB-2003 (first entry)
XX
DE PCR primer #1 for S. atroolivaceus leinamycin gene cluster ORF lnmL.
XX
KW Leinamycin biosynthesis gene cluster; lnm; open reading frame; ORF;
KW anti-tumour antibiotic; broad spectrum antimicrobial activity;
KW Gram-positive; Gram-negative bacteria; chemical modification; metabolite;
KW apo-carrier protein; holo-carrier protein; tumour; polyketide;
KW hybrid polypeptide/polyketide metabolite; lnm production; cytostatic;
KW PCR; primer; ss.
XX
OS Streptomyces atroolivaceus.
XX
PN WO200277179-A2.
XX
PD 03-OCT-2002.
XX
PF 22-MAR-2002; 2002WO-US008937.
XX
PR 26-MAR-2001; 2001US-0278935P.
XX
PA (REGC) UNIV CALIFORNIA.
PA (KYOW) KYOWA HAKKO KOGYO KK.
XX
PI Shen B, Cheng Y, Tang G;
XX
DR WPI; 2003-018907/01.
XX
PT Novel gene cluster responsible for synthesis of leinamycin in
PT Streptomyces atroolivaceus useful for making various peptide and/or
PT polyketide, and/or hybrid polypeptide/polyketide metabolites.
XX
PS Claim 1; Page 28; 185pp; English.
XX
CC The present invention relates to the isolation of the Streptomyces
CC atroolivaceus leinamycin (lnm) biosynthesis gene cluster containing 71
CC open reading frames (ORFs) (ORFs -35 through -1, ORFs lnmA through lnmZ,
CC and ORFs +1 through +9). Leinamycin is a novel anti-tumour antibiotic
CC produced by several Streptomyces species. It exhibits broad spectrum
CC antimicrobial activity against Gram-positive and Gram-negative bacteria,
CC but not against fungi. The polypeptides encoded by the lnm biosynthesis
CC gene cluster ORFs are useful for chemically modifying a molecule in a
CC host cell. The host cell is a bacterium or eukaryotic cell, including a
CC mammalian, yeast, plant, fungal, or insect cell. The molecule is an
CC endogenous metabolite produced by the host cell or exogenously supplied
CC or amino transferase. The polypeptides encoded by the lnm gene cluster
CC are useful for converting an apo-carrier protein to a holo-carrier
CC protein. lnm shows potent antitumour activity in tumour models in vivo.
CC The lnm gene cluster modules and/or catalytic domains are useful for
CC making various peptide and/or polyketide, and/or hybrid
CC polypeptide/polyketide metabolites. The proteins encoded by the ORFs are
CC useful alone, or in combination with other active domains to modify
CC various target substrates. The lnm gene cluster is useful to upregulate

CC endogenous lnm production to permit lnm production in cells and/or to
CC make various modified lnm. lnm, its analogue, or other polyketide,
CC peptide or hybrid polyketide/peptide metabolites are useful as
CC therapeutic agents, to treat a number of disorders, depending upon the
CC type of metabolites. ABX34290-ABX34431 represent PCR primers used to
CC amplify individual ORFs of the S. atroolivaceus leinamycin biosynthesis
CC gene cluster
XX
SQ Sequence 18 BP; 5 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 872 AGGACTCAGGCACCACAG 889
||||| ||| ||| |||
Db 1 ATGACCCAGGCACCACCTG 18
RESULT 360
ADE43736
ID ADE43736 standard; DNA; 18 BP.
XX
AC ADE43736;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human KNSL1 PCR primer, SEQ ID 341.
XX
KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;
KW Alzheimer's disease; neuroprotective; nontropic; gene therapy;
KW Chromosome 10; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003054143-A2.
XX
PD 03-JUL-2003.
XX
PF 25-OCT-2002; 2002WO-US034679.
XX
PR 25-OCT-2001; 2001US-0339525P.
PR 08-NOV-2001; 2001US-0336929P.
PR 08-NOV-2001; 2001US-0338010P.
PR 09-NOV-2001; 2001US-0338363P.
PR 04-DEC-2001; 2001US-0337052P.
PR 28-MAR-2002; 2002US-0368919P.
XX
PA (NEUR-) NEUROGENETICS INC.
PA (GEHO) GEN HOSPITAL CORP.
XX
PI Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;
PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;
XX
WPI; 2003-559131/52.
XX
CC Determining a predisposition for or the occurrence of neurodegenerative
CC disease, e.g. Alzheimer's disease by detecting in a target nucleic acid
CC the presence or absence of an allelic variant of one or more polymorphic
CC regions.
XX
PS Example 3; Page 292; 849pp; English.
XX
CC The present invention relates to a method (M1) for determining a
CC predisposition for or the occurrence of neurodegenerative disease in a
CC subject. The method comprises detecting in a target nucleic acid obtained
CC from the subject the presence or absence of an allelic variant of one or
CC more polymorphic regions of one or more genes selected from uPA
CC (urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-
CC degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid
CC lyase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the
CC presence of at least one of the allelic variant of one or more
CC polymorphic regions is indicative of a predisposition for or the

occurrence of neurodegenerative disease. The genes are all located on chromosome 10. M1 is useful for determining a predisposition for or the occurrence of, and for treating neurodegenerative disease, particularly Alzheimer's disease. The present sequence is a PCR primer, which was used in the method of the invention.

CC occurrence of, and for treating neurodegenerative disease, particularly
CC Alzheimer's disease. The present sequence is a PCR primer, which was used
CC in the method of the invention.

```

CC locus is situated on chromosome 3
XX
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;

Query Match          0.6%; Score 13.2; DB 1; Length 21;
Best Local Similarity 83.3%; Pred. No. 6.2e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 36 GGAGCCTCAGTCCAGAGA 53
Db 20 GGAGCCTGAGTCTCTAGA 3

RESULT 363
ID ABK71254/c
XX
AC ABK71254;
XX
DT 15-JUL-2002 (first entry)
XX
DE Mouse HYPLIPI locus PCR primer #327.
XX
KW Human; mouse; HYPLIPI; FCHL1; familial combined hyperlipidaemia; cancer;
KW lipid disorder; PCR; primer; ss.
XX
OS Mus sp.
XX
PN WO200220848-A2.
XX
PD 14-MAR-2002.
XX
PF 07-SEP-2001; 2001WO-US028182.
XX
PR 08-SEP-2000; 2000US-0231322P.
XX
PA (RECC ) UNIV CALIFORNIA.
XX
PI Bodnar JS, Castellani LW, Chatterjee A, De Jong P, Lusis AJ;
PI Ohmen J, Ross D, Tafuri S, Wu C;
XX
DR WPI; 2002-329882/36.
XX
PT New mouse HYPLIPI and human FCHL1 (familial combined hyperlipidemia)
PT genes and their sequence variations, useful for diagnosing, treating or
PT preventing lipid disorders and cancers.
XX
PS Claim 11; Page 77; 102pp; English.
XX
CC The invention relates to an isolated polynucleotide comprising a sequence
CC variation of a mouse HYPLIPI cDNA or a human FCHL1 (familial combined
CC hyperlipidaemia) gene. The FCHL1 polynucleotide, the FCHL1 polypeptide or
CC antibody immunoreactive to the FCHL1 polypeptide are useful for treating
CC or preventing cancer associated with expression of FCHL1, as well as for
CC treating lipid disorder. The mouse HYPLIPI cDNA or human FCHL1 gene are
CC also useful for diagnosing or prognosing a predisposition to lipid
CC disorder and cancer. ABK70902-ABK71303 represent mouse HYPLIPI, human
CC FCHL1 coding sequences and PCR primers of the invention
XX
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;

Query Match          0.6%; Score 13.2; DB 1; Length 21;
Best Local Similarity 83.3%; Pred. No. 6.2e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 36 GGAGCCTCAGTCCAGAGA 53
Db 20 GGAGCCTGAGTCTCTAGA 3

RESULT 364
ID ADA15393/c
ADADA15393 standard; DNA; 21 BP.

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XX
AC ADA15393;
XX
DT 06-NOV-2003 (first entry)
XX
DE Mouse HYPLIPI locus PCR primer #333.
XX
KW Mouse; PCR; primer; ss; HYPLIPI; FCHL1; variation; lipid disorder;
KW allele; anti-lipid disorder; anti-cancer therapy; gene therapy;
KW familial combined hyperlipidaemia; coronary artery disease;
KW atherogenic lipoprotein phenotype; hyperapobetalipoproteinaemia;
KW hypertriglyceridaemia; low density lipoprotein subclass B; LDL;
KW familial dyslipidemic hypertension; syndrome X; hypercholesterolaemia;
KW obesity; insulin resistance; cancer; cytostatic; antilipaeamic;
KW hypotensive; anorectic.
XX
OS Mus sp.
XX
PN US2003064372-A1.
XX
PD 03-APR-2003.
XX
PF 07-SEP-2001; 2001US-00949428.
XX
PR 22-JUN-2000; 2000US-0213322P.
XX
PA (BODN/) BODNAR J S.
PA (CAST/) CASTELLANI L W.
PA (CHAT/) CHATTERJEE A.
PA (JONG/) JONG P D.
PA (LUSI/) LUSIS A J.
PA (OHME/) OHMEN J.
PA (ROSS/) ROSS D.
PA (TAFU/) TAFURI S.
PA (WUCC/) WU C.
XX
PI Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusis AJ;
PI Ohmen J, Ross D, Tafuri S, Wu C;
XX
DR WPI; 2003-540780/51.
XX
PT Novel isolated polynucleotide comprising a mouse or human familial
PT combined hyperlipidemia 1 gene having a variation that is associated with
PT a lipid disorder, useful for identifying susceptibility to the lipid
PT disorder.
XX
PS Claim 11; Page 40; 63pp; English.
XX
CC The invention discloses isolated polynucleotides comprising mouse HYPLIPI
CC cDNA sequence, mouse HYPLIPI genomic DNA, or the homologous human
CC familial combined hyperlipidaemia 1 (FCHL1) gene, where a variation in
CC the sequence is associated with a lipid disorder. Also claimed is an
CC isolated polypeptide comprising a variant form of the mouse HYPLIPI amino
CC acid sequence, or a variant form of a fully defined human FCHL1 amino
CC acid sequence, where the variant is associated with the lipid disorder,
CC an isolated polynucleotide having at least 12 contiguous nucleotides of
CC the isolated polynucleotides, where the 12 contiguous nucleotides span
CC the variation position, an isolated polypeptide comprising 4 contiguous
CC amino acids of the encode polypeptides, where the 4 contiguous amino
CC acids span the variation position, a kit for the detection of the FCHL1
CC locus comprising, an isolated antibody, identifying susceptibility to a
CC lipid disorder which comprises comparing the nucleotide sequence of the
CC suspected FCHL1 allele with a wild-type FCHL1 nucleotide sequence, where
CC the difference between the suspected allele and the wild-type sequence
CC identifies a sequence variation of FCHL1 nucleotide sequence and a
CC pharmaceutical composition. Also disclosed is a transgenic animal which
CC carries an altered HYPLIPI or FCHL1 allele and a method for screening
CC drugs for inhibition or restoration of FCHL1 gene function as an anti-
CC lipid disorder or anti-cancer therapy. The polynucleotides, polypeptides
CC and antibodies are useful for treating or preventing (e.g. gene therapy)
CC a lipid disorder associated with expression of FCHL1, for diagnosis or
CC prognosis of predisposition to lipid disorder, and cancer and for
CC treating a lipid disorder such as familial combined hyperlipidaemia,

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CC coronary artery disease, atherogenic lipoprotein phenotype.
CC hyperapobetalipoproteinaemia, hypertriglyceridaemia, low density
CC lipoprotein (LDL) subclass B, familial dyslipidemic hypertension, and
CC syndrome X, hypercholesterolaemia, obesity, insulin resistance and
CC cancer. The sequence presented is a PCR primer which was used to amplify
CC part of the mouse HYPLIP1 locus.
XX
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.2; DB 1; Length 21;
Best Local Similarity 83.3%; Pred. No. 6.2e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 36 GGAGCCTCAGTCCAGAGA 53
DB 20 GGAGCCTCAGTCCCTCAGA 3

RESULT 365
ADB95955/c
ID ADB95955 standard; DNA; 21 BP.
XX
AC ADB95955;
XX
DT 04-DEC-2003 (first entry)
XX
DE Mouse HYPLIP1 PCR primer #333.
XX
KW cytostatic; antilipemic; gene therapy; peptide therapy; HYPLIP1; FCHLI;
KW cancer; metabolic pathway; cellular mechanism; lipid disorder;
KW familial combined hyperlipidaemia; mouse; PCR; primer; ss.
XX
OS Mus sp.
XX
PN US2003054418-A1.
XX
PD 20-MAR-2003.
XX
PF 07-SEP-2001; 2001US-00949427.
XX
PR 08-SEP-2000; 2000US-0231322P.
XX
PA (BODN/) BODNAR J S.
PA (CAST/) CASTELLANI L W.
PA (CHAT/) CHATTERJEE A.
PA (JONG/) JONG P D.
PA (LUSI/) LUSIS A J.
PA (OHME/) OHMEN J.
PA (ROSS/) ROSS D.
PA (TAFU/) TAFURI S.
PA (WUCC/) WU C.
XX
PI Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusi AJ;
PI Ohmen J, Ross D, Tafuri S, Wu C;
XX
WPI; 2003-695901/66.
XX
PT Novel human FCHLI or mouse HYPLIP1 polypeptide, useful for drug
PT screening, peptide therapy of lipid disorder or cancer.
XX
PS Claim 11; Page 39; 56pp; English.
XX
The invention describes an isolated polypeptide (I) comprising a variant
CC form of a mouse HYPLIP1 polypeptide sequence (S1) or a human FCHLI
CC polypeptide sequence (S2), not given in the specification, where the
CC variant form is associated with cancer, or an amino acid sequence having
CC at least 65 % sequence identity to (S1) or (S2). A composition comprising
CC DNA encoding (I) is useful for treating or preventing cancer associated
CC with expression of FCHLI. FCHLI gene or HYPLIP1 gene and its product are
CC useful for the study of metabolic pathway and cellular mechanism to
CC identify other genes, receptors and relationships that contribute to
CC lipid disorder and cancer. FCHLI gene or its fragments are useful in gene
CC therapy to increase the amount of the expression products of the gene for

CC the treatment of lipid disorder or cancerous cells. The sequence
CC variation of FCHLI gene or HYPLIP1 gene is also useful in the diagnosis
CC and prognosis of predisposition to lipid disorder and cancer. Antisense
CC polynucleotide sequences are useful in preventing or diminishing the
CC expression of HYPLIP1 or FCHLI locus. This sequence represents a primer
CC used in the analysis of the mouse HYPLIP1 gene.
XX
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.2; DB 1; Length 21;
Best Local Similarity 83.3%; Pred. No. 6.2e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 36 GGAGCCTCAGTCCAGAGA 53
DB 20 GGAGCCTCAGTCCCTCAGA 3

RESULT 366
ABH07885/c
ID ABH07885 standard; DNA; 13 BP.
XX
AC ABH07885;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 207862 for detecting SNP TSC0050831.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 207862; 29pp + Sequence Listing; German.
XX
The invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;


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XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIC-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 207861; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABR00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX CC
XX SQ Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.6%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 992 TTGTTTGTGGGAA 1004
Db 1 TTGTTTGTGGGAA 13
RESULT 370
AAQ38798/C
ID AAQ38798 standard; DNA; 15 BP.
XX AC AAQ38798;
XX DT 25-MAR-2003 (revised)
XX DT 26-JUN-1993 (first entry)
XX DE PCR primer #12 for analysis of lower TCR Vbeta gene usage in RA SLLs.
XX KW TCR; T cell receptor; autoimmune disease; rheumatoid arthritis; RA;
XX KW J beta domain; V beta domain; T-cell mediated autoimmune disease;
XX KW antagonists.
XX OS Homo sapiens.
XX OS WO9306135-A1.
XX PN 01-APR-1993.
XX PD 23-SEP-1992; 92WO-US008094.
XX PF 23-SEP-1991; 91US-00765222.
XX PR 18-OCT-1991; 91US-00779445.
XX PR 18-MAR-1992; 92US-00853362.
XX PA (GETH ) GENENTECH INC.
XX PI Amento EP;
XX DR WPI; 1993-117475/14.
XX PT T-cell receptor antagonising polypeptide(s) - used in the diagnosis and
treatment of auto-immune disorders, partic. rheumatoid arthritis.
XX Example 1; Page 22; 51pp; English.
XX This 5' PCR primer was used with a 3' primer designated a constant region
sequence common to all TCR beta transcripts. It was used for the PCR
analysis of lower TCR usage in synovial Vbetas. This primer was used for
Vbeta family 9, subfamily 9.1, Jbeta 2.3, Cbeta 2 and corresponds to D &
J translation AAR34166. (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 15 BP; 2 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 13; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1096 CCCACCCCTGGGCT 1108
Db 14 CCCACCCCTGGGCT 2
RESULT 371
AAAX65124/C
ID AAAX65124 standard; RNA; 15 BP.
XX AC AAAX65124;
XX DT 20-JUL-1999 (first entry)
XX DE Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1756.
XX KW Arthritic condition; graft tolerance; immune response; target; cleavage;
XX KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
XX KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
XX KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
XX KW diagnosis; ss.
XX OS Mus sp.
XX PN WO9618736-A2.
XX PD 20-JUN-1996.
XX PF 22-NOV-1995; 95WO-US015516.
XX PR 13-DEC-1994; 94US-00354920.
XX PR 23-DEC-1994; 94US-00363253.
XX PR 23-DEC-1994; 94US-00363254.
XX PR 17-FEB-1995; 95US-00390850.
XX PR 20-APR-1995; 95US-00426124.
XX PR 02-MAY-1995; 95US-00432874.
XX PR 04-MAY-1995; 95US-00434509.
XX PR 07-JUL-1995; 95US-0000951P.
XX PR 07-JUL-1995; 95US-0000974P.
XX PR 07-AUG-1995; 95US-00512861.
XX PR 05-OCT-1995; 95US-00541365.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
XX PI Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
XX PI Karpeisky A, Thompson JD, Modak A, Burgin A;
XX DR WPI; 1996-300653/30.
XX PT Enzymatic nucleic acid molecules having a hammer-head motif - used for
PT the treatment of arthritis, induction of graft tolerance or treatment of
PT auto-immune diseases.
XX PS Claim 10; Page 177; 307pp; English.
XX CC The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

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CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
 CC can inhibit collagenase and stromelysin production in the synovial
 CC membrane of joints for the treatment or prevention of arthritis,
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
 CC be used to treat antigen presenting cells of a donor to induce tolerance
 CC in a recipient to an alloantigen of a donor. They can also be used for
 CC enhancing graft tolerance or for treating autoimmune disease, and for
 CC treating allergies and other inflammatory conditions. The ENA's can also
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of
 CC stromelysin without introducing the non-specific effects upon gene
 CC expression which accompany treatment with retinoids and dexamethasone.
 CC The concentration of ribozyme required to affect a therapeutic treatment
 CC is lower than that required of antisense molecules, and is highly
 CC specific. The present sequence is used in the exemplification of the
 CC present invention
 XX

SQ Sequence 15 BP; 1 A; 3 C; 3 G; 0 T; 8 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 2.5e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1011 ACCTGAAAAAGAG 1023

DB 13 ACCTGAAAAAGAG 1

RESULT 372

AAAG65122/c

ID AAG65122 standard; RNA; 15 BP.

XX AAG65122;

AC 20-JUL-1999 (first entry)

DE Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1754.

XX Arthritic condition; graft tolerance; immune response; target; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
 KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
 KW diagnosis; ss.

XX Mus sp.

OS WO9618736-A2.

PN 20-JUN-1996.

XX 22-NOV-1995; 95WO-US015516.

XX 13-DEC-1994; 94US-00354920.

XX 23-DEC-1994; 94US-00363253.

XX 23-DEC-1994; 94US-00363254.

XX 17-FEB-1995; 95US-00390850.

XX 20-APR-1995; 95US-00426124.

XX 02-MAY-1995; 95US-00432874.

XX 04-MAY-1995; 95US-00434509.

XX 07-JUL-1995; 95US-0000951P.

XX 07-AUG-1995; 95US-0000974P.

XX 05-OCT-1995; 95US-00512861.

XX (RIBO-) RIBOZYME PHARM INC.

XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
 PI McSwiggan J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
 PI Karpeisky A, Thompson JD, Modak A, Burgin A;
 DR WPI; 1996-300653/30.
 XX Enzymatic nucleic acid molecules having a hammer-head motif - used for

PT the treatment of arthritis, induction of graft tolerance or treatment of
 PT auto-immune diseases.

PS Claim 10; Page 177; 307pp; English.

XX The present invention describes a novel enzymatic nucleic acid (ENA)
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
 CC can inhibit collagenase and stromelysin production in the synovial
 CC membrane of joints for the treatment or prevention of arthritis,
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
 CC be used to treat antigen presenting cells of a donor to induce tolerance
 CC in a recipient to an alloantigen of a donor. They can also be used for
 CC enhancing graft tolerance or for treating autoimmune disease, and for
 CC treating allergies and other inflammatory conditions. The ENA's can also
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of
 CC stromelysin without introducing the non-specific effects upon gene
 CC expression which accompany treatment with retinoids and dexamethasone.
 CC The concentration of ribozyme required to affect a therapeutic treatment
 CC is lower than that required of antisense molecules, and is highly
 CC specific. The present sequence is used in the exemplification of the
 CC present invention
 XX

SQ Sequence 15 BP; 1 A; 3 C; 2 G; 0 T; 9 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 2.5e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1011 ACCTGAAAAAGAG 1023

DB 14 ACCTGAAAAAGAG 2

RESULT 373

AAAG65123/c

ID AAG65123 standard; RNA; 15 BP.

XX AAG65123;

AC 20-JUL-1999 (first entry)

DE Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1755.

XX Arthritic condition; graft tolerance; immune response; target; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
 KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
 KW diagnosis; ss.

XX Mus sp.

OS WO9618736-A2.

PN 20-JUN-1996.

XX 22-NOV-1995; 95WO-US015516.

XX 13-DEC-1994; 94US-00354920.

XX 23-DEC-1994; 94US-00363253.

XX 23-DEC-1994; 94US-00363254.

XX 17-FEB-1995; 95US-00390850.

XX 20-APR-1995; 95US-00426124.

XX 02-MAY-1995; 95US-00432874.

XX 04-MAY-1995; 95US-00434509.

XX 07-JUL-1995; 95US-0000951P.

XX 07-AUG-1995; 95US-0000974P.

XX 05-OCT-1995; 95US-00512861.

XX (RIBO-) RIBOZYME PHARM INC.

PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
 PI McSwiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
 PI Karpeisky A, Thompson JD, Modak A, Burgin A;
 XX WPI; 1996-300653/30.
 XX Enzymatic nucleic acid molecules having a hammer-head motif - used for
 PT the treatment of arthritis, induction of graft tolerance or treatment of
 PT auto-immune diseases.
 XX Claim 10; Page 177; 307pp; English.
 XX The present invention describes a novel enzymatic nucleic acid (ENA)
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
 CC can inhibit collagenase and stromelysin production in the synovial
 CC membrane of joints for the treatment or prevention of arthritis,
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
 CC be used to treat antigen presenting cells of a donor to induce tolerance
 CC in a recipient to an alloantigen of a donor. They can also be used for
 CC enhancing graft tolerance or for treating autoimmune disease, and for
 CC treating allergies and other inflammatory conditions. The ENA's can also
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of
 CC stromelysin without introducing the non-specific effects upon gene
 CC expression which accompany treatment with retinoids and dexamethasone.
 CC The concentration of ribozyme required to affect a therapeutic treatment
 CC is lower than that required of antisense molecules, and is highly
 CC specific. The present sequence is used in the exemplification of the
 CC present invention
 XX Sequence 15 BP; 1 A; 3 C; 3 G; 0 T; 8 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 2.5e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1011 ACCTGAAAAAGAG 1023
 DB 13 ACCTGAAAAAGAG 1

RESULT 374
 AAF47944
 ID AAF47944 standard; DNA; 15 BP.
 AC AAF47944;
 XX 30-MAR-2001 (first entry)
 DT
 XX IGFBP3 oligonucleotide #1364.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytosolic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.
 XX WO200078341-A1.
 XX 28-DEC-2000.
 XX 21-JUN-2000; 2000WO-AU000693.
 XX 21-JUN-1999; 99US-0140345P.
 XX (MURD-) MURDOCH CHILDRENS RES INST.

PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX Example 7; Page 53; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

XX Sequence 15 BP; 2 A; 9 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 2.5e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1088 GCTTCACCCCCAC 1100
 DB 2 GCTTCACCCCCAC 14

RESULT 375
 AAT81536/C
 ID AAT81536 standard; RNA; 17 BP.

XX AAT81536;
 XX 14-DEC-1997 (first entry)
 DT
 XX Human c-myb hammerhead ribozyme target sequence (nt. position 2822).
 DE Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
 KW smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
 KW coronary angioplasty; ss.

XX Homo sapiens.

XX WO9531541-A2.
 XX 23-NOV-1995.
 XX 18-MAY-1995; 95WO-US006368.
 XX 18-MAY-1994; 94US-00245466.
 XX 13-JAN-1995; 95US-00373124.

XX (RIBO-) RIBOZYME PHARM INC.

XX Stinchcomb DT, Draper K, McSwiggen J, Jarvis T;
 XX WPI; 1996-010927/01.

XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
 PT for treating restenosis or cancer.

XX Claim 1; Page 77; 128pp; English.

XX The present sequence represents the preferred target sequence for an
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
 CC the human c-myc sequence at the base position indicated in the descriptor
 CC line. The c-myc sequence was screened for optimal ribozyme target sites
 CC using a computer folding algorithm, and regions of the mRNA which did not
 CC form secondary folding structures and contained potential ribozyme
 CC cleavage sites were identified. Ribozymes were synthesized and their
 CC activities optimised by either varying the length of the binding arms or
 CC by modification to prevent degradation by nucleases. The ribozymes cleave
 CC the c-myc sequence and can be used to prevent smooth muscle cell
 CC hyperproliferation in restenosis, especially after coronary angioplasty,
 CC and in cancers
 XX
 SQ Sequence 17 BP; 6 A; 2 C; 6 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 13; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 975 GTCCAGCTCTAC 987
 DB 13 GTCCAGCTCTAC 1
 RESULT 376
 ID ABL45035 standard; RNA; 17 BP.
 AC ABL45035;
 XX
 DT 12-MAR-2002 (first entry)
 DE Human NOGO Amberzyme #50.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowrira EM;
 XX WPI; 2001-607195/69.
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

PT central nervous system injury.
 XX
 PS Claim 88; Page 131; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an amberzyme molecule of the invention
 XX
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 13; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1134 CACCTCCAGCTCC 1146
 DB 14 CACCTCCAGCTCC 2
 RESULT 377
 ID ABL45035 standard; DNA; 17 BP.
 XX
 AC ABL45035;
 XX
 DT 11-APR-2002 (first entry)
 XX
 DE Human chromosome 1p36-35 PCR primer SEQ ID NO:2079.
 XX
 KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN JP2001321190-A.
 XX
 PD 20-NOV-2001.
 XX
 PF 12-MAR-2001; 2001JP-00068285.
 XX
 PR 10-MAR-2000; 2000JP-00066716.
 XX
 PA (RIKA) RIKAGAKU KENKYUSHO.
 PA (GENO-) GENOTEX YG.
 XX

DR WPI; 2002-144136/19.
 XX
 PT Arraying genome clones.
 XX
 PS
 PS Claim 4; Page 45; 528pp; Japanese.
 XX
 CC The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention

XX
 SQ Sequence 17 BP; 3 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1043 CTACTAGCCCT 1055
 Db 5 CTACTAGCCCT 17

RESULT 378
 ADB42940
 ID ADB42940 standard; DNA; 17 BP.
 XX
 AC ADB42940;
 XX
 DT 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX
 XX Tumour suppression/reversion associated nucleotide #3263.
 XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX
 OS Homo sapiens.
 XX
 XX WO2003040369-A2.
 XX
 XX 15-MAY-2003.
 XX
 XX 17-SEP-2002; 2002WO-IB004219.
 XX
 XX 17-SEP-2001; 2001FR-00011981.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuljinder M;
 XX WPI; 2003-441574/41.
 XX
 XX New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related

PT polypeptide and antibodies.
 XX
 PS Disclosure; Page 413; 771pp; French.
 XX
 CC The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). CC Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, CC potentially useful for treating diseases associated with abnormal expression of the nucleotides.
 XX
 SQ Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 919 CTTTGCCCTTTAT 931
 Db 5 CTTTGCCCTTTAT 17

RESULT 379
 ADE48000
 ID ADE48000 standard; DNA; 17 BP.
 XX
 AC ADE48000;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 XX Human NOVX reverse PCR primer SEQ ID NO:362.
 XX human; cardiac; antiarteriosclerotic; hypotensive; immunosuppressive;
 KW dermatological; anorectic; cytostatic; antidiabetic; haemostatic;
 KW anti-HIV; antiasthmatic; antibacterial; virucide; neuroprotective;
 KW nontropic; antiparkinsonian; antilipemic; gene therapy; vaccine; PCR;
 KW primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO2003076642-A2.
 XX
 XX 18-SEP-2003.
 XX
 XX 02-AUG-2002; 2002WO-US024459.
 XX
 XX 02-AUG-2001; 2001US-0309501P.
 XX 03-AUG-2001; 2001US-0310291P.
 XX 08-AUG-2001; 2001US-0310951P.
 XX 09-AUG-2001; 2001US-0311292P.
 XX 13-AUG-2001; 2001US-0311979P.
 XX 14-AUG-2001; 2001US-0312203P.
 XX 17-AUG-2001; 2001US-0313156P.
 XX 17-AUG-2001; 2001US-0313201P.
 XX 20-AUG-2001; 2001US-0313702P.
 XX 21-AUG-2001; 2001US-0314031P.
 XX 23-AUG-2001; 2001US-0314466P.
 XX 28-AUG-2001; 2001US-0315403P.
 XX 29-AUG-2001; 2001US-0315853P.

PR 31-AUG-2001; 2001US-0316508P.
 PR 21-SEP-2001; 2001US-0323336P.
 PR 03-DEC-2001; 2001US-0338078P.
 PR 05-FEB-2002; 2002US-0354655P.
 PR 05-MAR-2002; 2002US-0361764P.
 PR 19-APR-2002; 2002US-0373825P.
 PR 15-MAY-2002; 2002US-0380971P.
 PR 15-MAY-2002; 2002US-0380980P.
 PR 16-MAY-2002; 2002US-0381039P.
 PR 28-MAY-2002; 2002US-0383761P.
 PR 29-MAY-2002; 2002US-0383887P.
 PR 01-AUG-2002; 2002US-00210130.
 XX (CURA-) CURAGEN CORP.
 XX Zerhusen BD, Patturajan M, Kekuda R, Miller CE, Rieger DK;
 PI Pena CE, Shimkets RA, Li L, Berghs C, Zhong M, Casman SJ, Voss EZ;
 PI Boldog FL, Padigaru M, Smithson G, Shenoy SG, Ji W, Gorman L;
 PI Vernet CAM, Leite MW, Guo X, Anderson DW, Spytek KA, Gerlach VL;
 PI Burgess CE, Khrantsov NV, Ort T, Ellerman K, Rastelli L, Agee ML;
 PI Chaudhuri A, Chant JS, Dipippo VA, Edinger SR, Eisen A, Gangolli EA;
 PI Giot L, Ooi CE, Rothenberg ME, Spaderna SK, Hjalt T, Liu X;
 PI Taupier RJ, Catterton E;
 XX WPI; 2003-779062/73.
 DR New NOVX polypeptides and nucleic acids, useful for preventing or
 XX treating NOVX-associated disorders, e.g. cancer, diabetes,
 PT atherosclerosis, asthma or AIDS, and in chromosome mapping, tissue typing
 PT or pharmacogenomics.
 PT
 PS Example 49; SEQ ID NO 362; 562pp; English.
 XX
 CC The invention relates to a novel (NOVX) human polypeptide. A polypeptide
 CC of the invention has cardiac, antiarteriosclerotic, hypotensive, and
 CC immunosuppressive, dermatological, anorectic, cytostatic, antidiabetic,
 CC haemostatic, anti-HIV, antiasthmatic, antibacterial, virucide,
 CC neuroprotective, neurotropic, antiparkinsonian, and antilipemic activity.
 CC A polynucleotide encoding a polypeptide of the invention may have a use
 CC in gene therapy, and as a vaccine. A polypeptide of the invention is
 CC useful in the manufacture of a medicament for treating a syndrome
 CC associated with a human disease, the disease selected from a pathology
 CC associated with the polypeptide. These may also be used in diagnosing,
 CC treating or preventing NOVX-associated disorders such as cardiomyopathy,
 CC atherosclerosis, hypertension, scleroderma, obesity, cancer, diabetes,
 CC haemophilia, graft-versus-host disease, AIDS, asthma, Crohn's disease,
 CC multiple sclerosis, infections, anorexia, cancer-associated cachexia,
 CC neurodegenerative disorders (e.g. Alzheimer's disease or Parkinson's
 CC disease), haematopoietic disorders, dyslipidaemias and other wasting
 CC disorders associated with chronic diseases. The nucleic acids are also
 CC used as hybridisation probes, in chromosome mapping, tissue typing,
 CC preventive medicine, and pharmacogenomics. The polypeptides are also
 CC useful as vaccines. The present sequence represents a PCR primer used in
 CC the invention.
 XX
 SQ Sequence 17 BP; 2 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1134 CACCTCCAGCTCC 1146
 Db |||||
 2 CACCTCCAGCTCC 14
 RESULT 380
 AAD15702
 ID AAD15702 standard; DNA; 18 BP.
 XX
 AC AAD15702;
 XX
 DT 15-NOV-2001 (first entry)

XX PCR primer #20, used to amplify equine influenza viral genome.
 DE
 XX Equine influenza virus; cold adaptation; temperature sensitivity;
 KW vaccine; PCR primer; ss.
 XX
 OS Unidentified.
 XX
 XX WO200160849-A2.
 XX
 PD 23-AUG-2001.
 XX
 PF 16-FEB-2001; 2001WO-US005048.
 XX
 PR 16-FEB-2000; 2000US-00506286.
 XX (UYPI-) UNIV PITTSBURGH.
 PA
 XX Dowling PW, Youngner JS;
 PI
 XX WPI; 2001-522584/57.
 DR
 XX Novel isolated equine influenza virus (wild-type and cold-adapted)
 PT proteins and viruses containing nucleic acid molecules encoding the
 PT proteins, which are useful for protecting animals from influenza virus
 PT infections.
 XX
 PS Disclosure; Page 120; 172pp; English.
 XX
 CC The patent discloses cold-adapted equine influenza viruses and
 CC reassortant influenza A viruses comprising at least one genome segment of
 CC such an equine influenza virus, wherein the equine influenza virus genome
 CC segment confers at least one identifying phenotype of the cold-adapted
 CC equine influenza virus, such as cold adaptation, temperature sensitivity,
 CC dominant interference or attenuation. The viruses are useful for
 CC protecting animals from diseases caused by influenza viruses. They are
 CC also used as vaccines. The present sequence is a PCR primer which is used
 CC to amplify equine influenza viral genome
 XX
 SQ Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 4.4e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 868 ACTGAGGAGCTCAG 880
 Db |||||
 2 ACTGAGGAGCTCAG 14
 RESULT 381
 ABT05119/c
 ID ABT05119 standard; DNA; 18 BP.
 XX
 AC ABT05119;
 XX
 DT 11-OCT-2002 (first entry)
 XX
 DE TNFRI expression modulation related antisense oligo SEQ ID No 149.
 XX
 KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFRI; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200248168-A1.
 PN
 XX 20-JUN-2002.
 PD
 XX
 PF 22-OCT-2001; 2001WO-US051224.
 XX
 PR 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowsert LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.
 XX
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
 XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 121pp; English.
 XX
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 XX length targeted to nucleic acid molecule encoding tumor necrosis factor
 XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
 XX TNFR1. The antisense compound is useful for inhibiting the expression of
 XX TNFR1 in cells or tissues. The antisense compound is also useful for
 XX treating an animal (preferably human) having a disease or condition
 XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
 XX the expression of TNFR1. The antisense compound is useful for
 XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 XX This polynucleotide sequence represents a human oligonucleotide relating
 XX to the TNFR1 of the invention
 XX
 XX Sequence 18 BP; 4 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 13; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 4.4e+02;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1130 CCTTCACCTCCAG 1142
 |||||
 Db 13 CCTTCACCTCCAG 1

RESULT 382
 AAV55813/c
 ID AAV55813 standard; DNA; 24 BP.
 XX
 XX AAV55813;
 XX
 XX 27-AUG-2003 (revised)
 DT 18-NOV-1998 (first entry)
 XX
 XX Multimerisation of minimal motifs using primer ZGA2.
 XX
 XX Fusion protein; stabilising polypeptide; proteolytic degradation;
 XX resistance; half-life; autoimmune disease; inflammation; nitro drug;
 XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;
 XX nitroreductase protein; enzyme therapy; prodrug therapy; protease;
 XX cancer; pathological condition; minimal motif; PCR primer; ss.
 XX
 XX Synthetic.
 OS
 OS Human herpesvirus 4.
 XX
 XX WO9822577-A1.
 XX
 XX 28-MAY-1998.
 XX
 XX 17-NOV-1997; 97WO-IB001508.
 XX
 XX 15-NOV-1996; 96US-0030986P.
 XX
 XX 25-JUN-1997; 97US-0048945P.
 XX
 XX (MASU/) MASUCCI M G.
 XX
 XX Masucci MG;
 PI
 XX
 XX WPI; 1998-312463/27.
 XX
 XX New fusion proteins resistant to proteolytic degradation - comprising a

PT core protein with a stabilising polypeptide comprising a peptide sequence
 PT containing glycine repeats.
 XX
 XX Disclosure; Page 72; 120pp; English.
 XX
 XX Sequences shown in AAV55812 to AAV55827 represent primers used in the
 XX course of the invention for the multimerisation of minimal motifs. The
 XX invention provides a method for increasing the resistance of a core
 XX protein to proteolytic degradation that comprises linking or inserting
 XX onto or into the core protein a stabilising polypeptide of formula
 XX [(Glya)(Glyb)(Glyc)Z]n where Glya, Glyb, Glyc are 1-6 sequential Gly
 XX residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
 XX and n can be anything between 1-66. X, Y and Z need not be identical from
 XX n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
 XX polypeptide can be linked onto or inserted into a nucleic acid encoding a
 XX core protein. The fusion proteins of the invention are more resistant to
 XX degradation by proteases and, thus, have a longer half-life than the
 XX unfused core protein. The products can be used for treating autoimmune
 XX diseases, cancer and inflammation. In particular, the core protein may be
 XX an IkappaB regulator protein for the treatment of inflammatory bowel
 XX disease, or a nitroreductase protein which can activate nitro drugs in
 XX enzyme/prodrug therapy to treat cancer or other pathological conditions.
 XX The fusion proteins can also be used in diagnostic methods such as in
 XX vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
 XX
 XX Sequence 24 BP; 5 A; 14 C; 3 G; 2 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 13; DB 1; Length 24;
 Best Local Similarity 76.2%; Pred. No. 9.7e+02;
 Matches 16; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 296 TGCTCTCGAGCTGTGTGTGG 316
 |||||
 Db 23 TGGTCTGGAGGTGCGGTGG 3

RESULT 383
 AAX22501/c
 ID AAX22501 standard; RNA; 16 BP.
 XX
 XX AAX22501;
 XX
 XX 25-MAR-2003 (revised)
 DT 21-MAY-1999 (first entry)
 XX
 XX Streptomyces sp. glnA gene RBS RNA fragment.
 XX
 XX Xylanase; acidophilic; thermostable; XYL I; XYL II; plant biomass;
 XX hemicellulase; beta-1,4 bond; xylosic chain; xylan; D-xylose; paper;
 XX pulp; chlorine bleaching; feed; beta-glucan; cellulose; lignin; ds.
 XX
 XX Streptomyces sp.
 OS
 OS US5871730-A.
 XX
 XX 16-FEB-1999.
 XX
 XX 29-JUL-1994; 94US-00282197.
 XX
 XX 29-JUL-1994; 94US-00282197.
 XX
 XX (UYSH) UNIV SHERBROOKE.
 XX
 XX Beaulieu C, Brzezinski R, Dery CV;
 XX
 XX WPI; 1996-141348/14.
 XX
 XX New acidophilic and thermostable xylanase enzymes from Actinomadura sp.
 XX FC7 - useful for treating plant biomass, especially paper and wood pulp,
 XX to degrade hemicellulose and hydrolyse xylan.
 XX
 XX Example 7; Fig 7; 60pp; English.
 XX


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PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
PT
PS Claim 2; Page 201; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
XX Sequence 17 BP; 4 A; 7 C; 1 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 62.5%; Pred. No. 4.2e+02;
XX Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 1170 CAACTTTGGCGTCCC 1185
DB 1 CAACUUUCAGCUCCC 16
XX
RESULT 386
AAT53529
XX AAT53529 standard; RNA; 17 BP.
XX
AC AAT53529;
XX
XX 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
XX Rat ICAM hammerhead ribozyme target sequence (nt. position 988).
XX
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX intercellular adhesion molecule; rel A; tumour necrosis factor;
XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX Philadelphia chromosome; inflammation; leukoemia; CML; cancer;
XX atherosclerosis; myocardial infarction; autoimmune disease;
XX transplant rejection; rheumatoid arthritis; stroke; restenosis;
XX myocardial ischaemia; Kawasaki disease; septic shock; HIV;
XX human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX
XX Rattus rattus.
XX

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XX WO9523225-A2.
XX
XX 31-AUG-1995.
XX
XX 23-FEB-1995; 95WO-IB000156.
XX
XX 23-FEB-1994; 94US-00201109.
XX 29-MAR-1994; 94US-00218934.
XX 04-APR-1994; 94US-00222795.
XX 07-APR-1994; 94US-00224483.
XX 15-APR-1994; 94US-00227958.
XX 18-MAY-1994; 94US-00228041.
XX 06-JUL-1994; 94US-00245736.
XX 15-AUG-1994; 94US-00271280.
XX 16-AUG-1994; 94US-00291932.
XX 17-AUG-1994; 94US-00292620.
XX 19-AUG-1994; 94US-00293520.
XX 02-SEP-1994; 94US-00300000.
XX 08-SEP-1994; 94US-00303039.
XX 23-SEP-1994; 94US-00311486.
XX 23-SEP-1994; 94US-00311749.
XX 28-SEP-1994; 94US-00314397.
XX 03-OCT-1994; 94US-00316771.
XX 07-OCT-1994; 94US-00319492.
XX 11-OCT-1994; 94US-00321993.
XX 04-NOV-1994; 94US-00334847.
XX 10-NOV-1994; 94US-00337608.
XX 28-NOV-1994; 94US-00345516.
XX 16-DEC-1994; 94US-00357577.
XX 23-DEC-1994; 94US-00363233.
XX 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
XX Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
XX Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
XX Tracz D, Usman N, Wincott FE, Woolf T;
XX
XX WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
PT
XX Claim 2; Page 202; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
XX Sequence 17 BP; 4 A; 7 C; 1 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 62.5%; Pred. No. 4.2e+02;
XX Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 1170 CAACTTTGGCGTCCC 1185
DB 2 CAACUUUCAGCUCCC 17
XX
RESULT 387

```

AAT53726
 ID AAT53726 standard; RNA; 17 BP.
 AC AAT53726;
 XX
 DT 25-MAR-2003 (revised)
 DT 03-APR-1997 (first entry)
 XX
 DE Rat ICAM hammerhead ribozyme target sequence (nt. position 2823).
 XX
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
 KW translocation; chronic myelogenous leukaemia; CML; cancer;
 KW Philadelphia chromosome; inflammation; autoimmune disease;
 KW atherosclerosis; myocardial infarction; stroke; restenosis;
 KW transplant rejection; rheumatoid arthritis; psoriasis;
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
 KW ss.
 XX
 OS Rattus rattus.
 XX
 PN WO9523225-A2.
 XX
 PD 31-AUG-1995.
 XX
 PF 23-FEB-1995; 95WO-IB000156.
 XX
 PR 23-FEB-1994; 94US-00201109.
 PR 29-MAR-1994; 94US-00218934.
 PR 04-APR-1994; 94US-00222795.
 PR 07-APR-1994; 94US-00224483.
 PR 15-APR-1994; 94US-00227958.
 PR 15-APR-1994; 94US-00228041.
 PR 18-MAY-1994; 94US-00245736.
 PR 06-JUL-1994; 94US-00271280.
 PR 15-AUG-1994; 94US-00291932.
 PR 16-AUG-1994; 94US-00291433.
 PR 17-AUG-1994; 94US-00292620.
 PR 19-AUG-1994; 94US-00293520.
 PR 02-SEP-1994; 94US-00300000.
 PR 08-SEP-1994; 94US-00303039.
 PR 23-SEP-1994; 94US-00311486.
 PR 23-SEP-1994; 94US-00311749.
 PR 28-SEP-1994; 94US-00314397.
 PR 03-OCT-1994; 94US-00316771.
 PR 07-OCT-1994; 94US-00319492.
 PR 11-OCT-1994; 94US-00321993.
 PR 04-NOV-1994; 94US-00334847.
 PR 10-NOV-1994; 94US-00337608.
 PR 28-NOV-1994; 94US-00345516.
 PR 16-DEC-1994; 94US-00357577.
 PR 23-DEC-1994; 94US-00363233.
 PR 30-JAN-1995; 95US-00380734.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
 PI Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, Mcswiggen JA;
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
 PI Tracz D, Usman N, Wincott FE, Woolf T;
 XX
 DR WPI; 1995-351090/45.
 XX
 PT Ribozymes having modified bases and methods for producing them - for use
 PT in inhibiting disease related genes.
 XX
 PS Claim 2; Page 204; 407pp; English.
 XX
 CC The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the

CC nucleotide base position indicated in the DE line. Regions of the mRNA
 CC that do not form secondary folding structures and that contain potential
 CC hammerhead and hairpin ribozyme cleavage sites were identified by
 CC computer analysis. Ribozymes directed against these mRNA sequences were
 CC designed and synthesised with modifications that improve their nuclease
 CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
 CC inhibit ICAM-1 expression, making them useful for reducing transplant
 CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
 CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
 CC correct PI field.)
 XX
 SQ Sequence 17 BP; 4 A; 7 C; 1 G; 0 T; 5 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 62.5%; Pred. No. 4.2e+02;
 Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
 QY 1170 CAACCTTTCGGCTCC 1185
 Db 1 CAACUUUCAGCUCC 16
 RESULT 388
 AAX73233/C
 ID AAX73233 standard; RNA; 17 BP.
 AC AAX73233;
 XX
 DT 28-JUL-1999 (first entry)
 XX
 DE Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #666.
 XX
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX
 OS Mus sp.
 XX
 PN WO9715662-A2.
 XX
 PD 01-MAY-1997.
 XX
 PF 25-OCT-1996; 96WO-US017480.
 XX
 PR 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX
 DR WPI; 1997-259017/23.
 XX
 PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX
 PS Claim 4; Page 144; 218pp; English.
 XX
 CC The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention

SQ Sequence 17 BP; 1 A; 7 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1278 GGAGGACAGCGCCAC 1293
 |||||
 17 GGAGGACAGAGTCCAC 2

Db

RESULT 389
 AAV97482
 ID AAV97482 standard; RNA; 17 BP.
 AC AAV97482;
 XX
 AC AAV97482;
 XX
 DT 17-MAR-1999 (first entry)
 XX
 DE Human EGF-R target sequence nucleotide position 2306.
 XX
 DE Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
 KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
 KW cancer; genetic drift; detection; mutation; ss.
 XX
 OS Homo sapiens.
 OS
 OS WO9833893-A2.
 FN
 XX
 PD 06-AUG-1998.
 XX
 PF 14-JAN-1998; 98WO-US000730.
 XX
 PR 31-JAN-1997; 97US-0036476P.
 PR 04-DEC-1997; 97US-00985162.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (UYAS-) UNIV ASTON.
 XX
 PI Akhtar S, Fell P, Mcswiggen JA;
 XX
 WPI; 1998-437449/37.
 XX
 DR Enzymatic nucleic acids - which cleave RNA derived from an epidermal
 XX growth factor receptor, useful for inhibiting cell proliferation and for
 XX treating cancers.
 XX
 PS Claim 5; Page 73; 109pp; English.
 XX
 CC The present invention describes enzymatic nucleic acid molecules (NAMS)
 CC which specifically cleave RNA derived from an epidermal growth factor
 CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
 CC represent specifically claimed target sequence from human EGF-R. AAV98044
 CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
 CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for
 CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR
 CC expression levels e.g. to inhibit cell proliferation in the prevention or
 CC treatment of cancers. The NAMS can also be used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of EGF-R RNA in a cell
 XX
 SQ Sequence 17 BP; 7 A; 1 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 75.0%; Pred. No. 4.2e+02;
 Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1024 GGGAGCTTGAAGAA 1039
 |||||
 1 GAGGAUCUUGAAGAA 16

Db

RESULT 390
 AAX59454
 ID AAX59454 standard; DNA; 17 BP.
 AC AAX59454;
 XX
 AC AAX59454;
 XX
 DT 16-JUL-1999 (first entry)
 XX
 DE Primer used in construction of humanised anti-HM1.24 antibody.
 XX

RAV39410
 ID AAV39410 standard; DNA; 17 BP.
 XX
 AC AAV39410;
 XX
 DT 21-SEP-1998 (first entry)
 XX
 DE Humanised anti-HM1.24 antibody PCR primer SEQ ID NO:72.
 XX
 KW Mouse; human; humanised; anti-HM1.24 antibody; myeloma; FR; CDR;
 KW framework region; complementarity determining region; antigenicity;
 KW PCR primer; ss.
 XX
 OS Synthetic.
 OS Mus sp.
 OS Homo sapiens.
 XX
 FN WO9814580-A1.
 XX
 PD 09-APR-1998.
 XX
 PF 03-OCT-1997; 97WO-JP003553.
 XX
 PR 04-OCT-1996; 96JP-00264756.
 XX
 PA (CHUS) CHUGAI SEIYAKU KK.
 XX
 PI Ono K, Ohtomo T, Tsuchiya M, Yoshimura Y, Koishihara Y, Kosaka M;
 XX WPI; 1998-286421/25.
 XX
 DR Humanised anti-HM1.24 antibody - for treatment of myeloma.
 XX
 PT Example 9; Page 140; 210pp; Japanese.
 XX
 CC A humanised anti-HM1.24 antibody has been developed which comprises human
 CC L and H chain C regions, and L and/or H chain V regions containing
 CC material originating in mouse anti-HM1.24 antibody. The V regions contain
 CC framework (FR) regions of human origin and complementarity determining
 CC regions (CDR) of mouse origin, leading to a reshaped humanised antibody.
 CC The C regions are human Ck (L-chain) and human C gamma (especially C
 CC gamma 1) (H-chain). The FR regions of the L chain V region are derived
 CC from human subtype HSG1 (e.g. from human antibody RE1) and the FR regions
 CC of the H chain V region are derived from human subtype HSG1 (e.g. FR1-3
 CC from human antibody HG3 and FR4 from human antibody JH6). The present
 CC sequence represents a PCR primer used in an example from the present
 CC invention. The antibodies are used for the treatment of myeloma,
 CC especially by injection, intravenously, intramuscularly or
 CC subcutaneously. The antibodies are used at 0.01-1000 (especially 5-100)
 CC mg/kg body weight. The humanised antibody has low antigenicity and is
 CC therefore effective therapeutically in humans
 XX
 SQ Sequence 17 BP; 5 A; 7 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1057 GCCCAACCCCAAGCT 1072
 |||||
 1 GCCCAACCCCAAGGT 16

Db

RESULT 391
 AAX59454
 ID AAX59454 standard; DNA; 17 BP.
 AC AAX59454;
 XX
 AC AAX59454;
 XX
 DT 16-JUL-1999 (first entry)
 XX
 DE Primer used in construction of humanised anti-HM1.24 antibody.
 XX

KW Reconstituted human antibody; peptide antigen HM1.24; framework region;
 KW complementary determining region; CDR; anti-HM1.24 antibody; myeloma;
 KW humanised antibody; primer; ss.

XX Synthetic.

XX WO9918212-A1.

XX 15-APR-1999.

XX 02-OCT-1998; 99WO-JP004469.

XX 03-OCT-1997; 97JP-00271726.

XX (CHUS) CHUGAI SEIYAKU KK.

XX Tsuchiya M;

XX WPI; 1999-277273/23.

XX Reconstituted human antibody useful in the treatment of myeloma.

PS Disclosure; Page 120; 256pp; Japanese.

CC The specification describes a reconstituted human antibody recognizing
 CC the peptide antigen HM1.24. This human antibody contains natural human
 CC framework regions modified by amino acid substitutions to provide
 CC homogeneity with a previously designed framework region (which may arise
 CC from a human or non-human source); and complementary determining regions
 CC (CDR) derived from a non-human anti-HM1.24 antibody. The reconstituted
 CC antibody is useful in the treatment of diseases in which the surface
 CC antigen HM1.24 is implicated such as myeloma. The present sequence is
 CC used in the creation of the antibodies of the invention

XX Sequence 17 BP; 5 A; 7 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4.2e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1057 GCCCAACCCCAAGCT 1072

DB 1 GCCCAACCCCAAGGT 16

RESULT 392

AAAL7471

ID AAAL7471 standard; RNA; 17 BP.

XX AAAL7471;

XX 19-JUN-2000 (first entry)

DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:697.

XX Human; aryl hydrocarbon nuclear transport; ARNT; TIB-2; angiogenesis;
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 KW age related macular degeneration; inflammation; neovascular glaucoma;
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
 KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX Homo sapiens.

XX WO9950403-A2.

XX 07-OCT-1999.

XX 24-MAR-1999; 99WO-US006507.

PR 27-MAR-1998; 98US-0079678P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;

XX WPI; 1999-591315/50.

XX Novel ribozymes for modulating the synthesis, expression and/or stability
 of an mRNA encoding an angiogenic factors.

XX Claim 53; Page 82; 305pp; English.

XX The present invention describes enzymatic nucleic acid molecules with RNA
 CC cleaving activity, which specifically cleave RNA encoded by an aryl
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
 CC AAA21596 to AAA21688 represent their corresponding target sequences;
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
 CC AAA23422 represent their corresponding target sequences. The ribozymes of
 CC the invention are used for modulating the synthesis, expression and/or
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
 CC especially used to treat cancer, diabetic retinopathy, age related
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
 CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
 CC integrin subunit alpha-6, or integrin subunit beta-3

XX Sequence 17 BP; 2 A; 8 C; 1 G; 0 T; 6 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;

Best Local Similarity 62.5%; Pred. No. 4.2e+02;

Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1126 TCCACCTTCACCTCCA 1141

DB 1 UCCUCCUCCGCUCCA 16

RESULT 393

AAAL7399

ID AAAL7399 standard; RNA; 17 BP.

XX AAAL7399;

XX 19-JUN-2000 (first entry)

DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:625.
 XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 KW age related macular degeneration; inflammation; neovascular glaucoma;
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
 KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX Homo sapiens.

XX WO9950403-A2.

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XX PD 07-OCT-1999.
XX OS Homo sapiens.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX DR WPI; 1999-591315/50.
XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX PS Claim 53; Page 77; 305pp; English.
XX CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 68.8%; Pred. No. 4.2e+02;
Matches 11; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 1261 AACCCCTTCAGAGT 1276
Db |||||:|||||
1 AAGCCCCUUGAGAGU 16
RESULT 394
AA17470
ID AAA17470 standard; RNA; 17 BP.
AC AAA17470;
XX
XX 19-JUN-2000 (first entry)
XX
XX Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:696.
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;

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KW XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX OS Homo sapiens.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX DR WPI; 1999-591315/50.
XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX PS Claim 53; Page 81; 305pp; English.
XX CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 3 A; 8 C; 1 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 4.2e+02;
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 1126 TCACCTTCACCTCCA 1141
Db |||||:|||||
2 UCCUCCUUCAGUCCA 17
RESULT 395
AA191927
ID AAF01927 standard; DNA; 17 BP.
AC AAF01927;
XX
XX 16-FEB-2001 (first entry)
XX
XX Hammerhead ribozyme substrate #222.
XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
XX interferon alpha; ss.

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OS Homo sapiens.
XX WO200061729-A2.
FN PD
XX 19-OCT-2000.
XX PF 11-APR-2000; 2000WO-US009721.
XX PR 12-APR-1999; 99US-0129390P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX WPI; 2000-647423/62.
XX DR Enzymatic and antisense nucleic acid inhibition of repressor genes,
XX PT useful for producing e.g. granulocyte colony stimulating factor protein,
XX PT interferon alpha and erythropoietin.
XX PS Claim 37; Page 61; 164pp; English.
XX CC The present invention relates to enzymatic and antisense nucleic acid
XX CC molecules that act as inhibitors of the expression of repressor genes
XX CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
XX CC factor gene, IRF-2 and/or the CAATP Displacement Protein (CDP).
XX CC Inhibition of the repressors removes prevents inhibition (and
XX CC consequently increases expression of) genes involved in the production of
XX CC erythropoietin, granulocyte colony stimulating factor protein and
XX CC interferon alpha
XX SQ Sequence 17 BP; 1 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1167 TCCCACTTTGGGCT 1182
DB 1 TCCCACTTTGGGCT 16
RESULT 396
ABK02379/c
ID ABK02379 standard; RNA; 17 BP.
XX AC ABK02379;
XX DT 12-MAR-2002 (first entry)
XX DE Human NOGO Amberyze #51.
XX KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW KW DNazyme; inozyme; G-cleaver; amberyze; zinzyme; lymphoma; leukaemia;
KW KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW KW inflammatory arthropathy; central nervous system injury;
KW KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW KW Parkinson's disease; ataxia; Huntington's disease;
KW KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX OS Homo sapiens.
XX OS Synthetic.
XX FN WO200159103-A2.
XX PD 16-AUG-2001.
XX PF 09-FEB-2001; 2001WO-US004273.

XX 11-FEB-2000; 2000US-0181797P.
XX 28-FEB-2000; 2000US-0185516P.
XX 06-MAR-2000; 2000US-0187128P.
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J.
XX (CHOW/) CHOWRIRA B M.
XX Blatt L, Mcswiggen J, Chowrira BM;
XX WPI; 2001-607195/69.
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
XX constructs, which down regulate expression of a CD20 gene or neurite
XX growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
XX central nervous system injury.
XX Claim 88; Page 131; 200pp; English.
XX The invention relates to a nucleic acid molecule which down regulates
XX expression of a CD20 gene and a nucleic acid molecule which down
XX regulates expression of a neurite growth inhibitor gene (NOGO). The
XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
XX DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
XX an amberyze (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
XX with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
XX of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
XX Furthermore, it may be contacted with a cell to reduce CD20 activity of
XX the cell and treat a patient having a condition associated with the level
XX of CD20. The treatment may further comprise the use of one or more
XX therapies. In particular, the CD20 targeting nucleic acid may be used to
XX treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
XX lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
XX immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
XX targeting nucleic acid is used to cleave RNA of the NOGO gene in the
XX presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
XX nucleic acid may be contacted with a cell to reduce NOGO activity of the
XX cell and treat a patient having a condition associated with the level of
XX NOGO. The treatment may further comprise the use of one or more
XX therapies. In particular, the NOGO-targetting nucleic acid may be used to
XX treat central nervous system (CNS) injury and cerebrovascular accident
XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
XX Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
XX disease, muscular dystrophy, and/or other neurodegenerative disease
XX states which respond to the modulation of NOGO expression. The present
XX sequence is an amberyze molecule of the invention
XX SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1130 CCTTCACCTCCAGCTC 1145
DB 16 CCAGCACCTCCAGCTC 1
RESULT 397
ABA79728/c
ID ABA79728 standard; DNA; 17 BP.
XX AC ABA79728;
XX DT 24-JAN-2002 (first entry)
XX DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2574.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOB;
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
 KW Alzheimer's disease; cytostatic; antiskilling; antianaemic; haemostatic;
 KW antilipemic; ss.
 XX Homo sapiens.
 XX OS
 XX PN WO200173002-A2.
 XX PD 04-OCT-2001.
 XX PF 27-MAR-2001; 2001WO-US009761.
 XX PR 27-MAR-2000; 2000US-0192176P.
 XX PR 27-MAR-2000; 2000US-0192179P.
 XX PR 01-JUN-2000; 2000US-0208538P.
 XX PR 30-OCT-2000; 2000US-0244989P.
 XX PA (UYDE) UNIV DELAWARE.
 XX PI Kmiec EB, Gamper HB, Rice MC;
 XX WPI; 2001-639230/73.
 XX DR
 XX PT Oligonucleotide for targeted alterations of genetic sequences and for
 PT treating cystic fibrosis, comprises at least one mismatch and chemical
 PT modification.
 XX
 XX PS Claim 7; Page 189; 294pp; English.
 XX PS The present invention provides single-stranded oligonucleotides which can
 CC be used for the targeted alteration of genomic sequences, where the
 CC oligonucleotide has at least one mismatch compared with the genomic
 CC sequence to be altered. In particular, these sequences are directed at
 CC the following genes: adenosine deaminase, p53, beta-globin,
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
 CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
 CC various syndromes. The present sequence is one of the gene correcting
 CC oligonucleotides of the invention
 XX
 XX SQ Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1224 CATCCTTGGCAGACGCC 1239
 DB 16 CATCCTTGGCACTGCC 1
 RESULT 398
 ABA79729
 ID ABA79729 standard; DNA; 17 BP.
 XX
 XX AC ABA79729;
 XX
 XX DT 24-JAN-2002 (first entry)
 XX

DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2575.
 XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOB;
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
 KW Alzheimer's disease; cytostatic; antiskilling; antianaemic; haemostatic;
 KW antilipemic; ss.
 XX Homo sapiens.
 XX OS
 XX PN WO200173002-A2.
 XX PD 04-OCT-2001.
 XX PF 27-MAR-2001; 2001WO-US009761.
 XX PR 27-MAR-2000; 2000US-0192176P.
 XX PR 27-MAR-2000; 2000US-0192179P.
 XX PR 01-JUN-2000; 2000US-0208538P.
 XX PR 30-OCT-2000; 2000US-0244989P.
 XX PA (UYDE) UNIV DELAWARE.
 XX PI Kmiec EB, Gamper HB, Rice MC;
 XX WPI; 2001-639230/73.
 XX DR
 XX PT Oligonucleotide for targeted alterations of genetic sequences and for
 PT treating cystic fibrosis, comprises at least one mismatch and chemical
 PT modification.
 XX
 XX PS Claim 7; Page 189; 294pp; English.
 XX PS The present invention provides single-stranded oligonucleotides which can
 CC be used for the targeted alteration of genomic sequences, where the
 CC oligonucleotide has at least one mismatch compared with the genomic
 CC sequence to be altered. In particular, these sequences are directed at
 CC the following genes: adenosine deaminase, p53, beta-globin,
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
 CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
 CC various syndromes. The present sequence is one of the gene correcting
 CC oligonucleotides of the invention
 XX
 XX SQ Sequence 17 BP; 3 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1224 CATCCTTGGCAGACGCC 1239
 DB 2 CATCCTTGGCACTGCC 17
 RESULT 399
 ABA79720/c
 ID ABA79720 standard; DNA; 17 BP.
 XX
 XX AC ABA79720;
 XX
 XX DT 24-JAN-2002 (first entry)
 XX

```
XX Factor IX mutation correcting oligonucleotide SEQ ID NO: 2566.
DE
DE
XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytoskeletal; antitickling; antianaemic; haemostatic;
KW antilepemic; ss.
XX
OS Homo sapiens.
XX
XX WO200173002-A2.
XX
XX 04-OCT-2001.
XX
XX 27-MAR-2001; 2001WO-US009761.
XX
XX 27-MAR-2000; 2000US-0192176P.
XX
XX 27-MAR-2000; 2000US-0192176P.
XX
XX 01-JUN-2000; 2000US-0208538P.
XX
XX 30-OCT-2000; 2000US-0244989P.
XX
XX (UYDE ) UNIV DELAWARE.
XX
XX Kmiec EB, Gamper HB, Rice MC;
XX
XX WPI; 2001-639230/73.
XX
XX Oligonucleotide for targeted alterations of genetic sequences and for
XX treating cystic fibrosis, comprises at least one mismatch and chemical
XX modification.
XX
XX Claim 7; Page 189; 294pp; English.
XX
XX The present invention provides single-stranded oligonucleotides which can
XX be used for the targeted alteration of genomic sequences, where the
XX oligonucleotide has at least one mismatch compared with the genomic
XX sequence to be altered. In particular, these sequences are directed at
XX the following genes: adenosine deaminase, p53, beta-globin,
XX retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
XX (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus
XX 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX presenilin-2 (PSN2). These can be used in the gene therapy of diseases
XX such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX haemophilia, hypercholesterolaemia, thalassemia, sickle cell anaemia,
XX Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX various syndromes. The present sequence is one of the gene correcting
XX oligonucleotides of the invention
XX
XX Sequence 17 BP; 4 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1224 CATCCTTGGCAGCC 1239
XX
XX 17 CATCCTTGGCACTGCC 2
XX
XX
XX RESULT 400
XX ABA79724/c
XX ID ABA79724 standard; DNA; 17 BP.
XX
XX ABA79724;
XX
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DT 24-JAN-2002 (first entry)
DE
DE
XX Factor IX mutation correcting oligonucleotide SEQ ID NO: 2570.
XX
XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytoskeletal; antitickling; antianaemic; haemostatic;
KW antilepemic; ss.
XX
XX Homo sapiens.
XX
XX WO200173002-A2.
XX
XX 04-OCT-2001.
XX
XX 27-MAR-2001; 2001WO-US009761.
XX
XX 27-MAR-2000; 2000US-0192176P.
XX
XX 27-MAR-2000; 2000US-0192176P.
XX
XX 01-JUN-2000; 2000US-0208538P.
XX
XX 30-OCT-2000; 2000US-0244989P.
XX
XX (UYDE ) UNIV DELAWARE.
XX
XX Kmiec EB, Gamper HB, Rice MC;
XX
XX WPI; 2001-639230/73.
XX
XX Oligonucleotide for targeted alterations of genetic sequences and for
XX treating cystic fibrosis, comprises at least one mismatch and chemical
XX modification.
XX
XX Claim 7; Page 189; 294pp; English.
XX
XX The present invention provides single-stranded oligonucleotides which can
XX be used for the targeted alteration of genomic sequences, where the
XX oligonucleotide has at least one mismatch compared with the genomic
XX sequence to be altered. In particular, these sequences are directed at
XX the following genes: adenosine deaminase, p53, beta-globin,
XX retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
XX (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus
XX 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX presenilin-2 (PSN2). These can be used in the gene therapy of diseases
XX such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX haemophilia, hypercholesterolaemia, thalassemia, sickle cell anaemia,
XX Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX various syndromes. The present sequence is one of the gene correcting
XX oligonucleotides of the invention
XX
XX Sequence 17 BP; 4 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1224 CATCCTTGGCAGCC 1239
XX
XX 17 CATCCTTGGCACTGCC 2
XX
XX
XX RESULT 401
XX ABA79725
XX ID ABA79725 standard; DNA; 17 BP.
XX
XX ABA79725;
XX
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XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention

XX Sequence 17 BP; 10 A; 4 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 914 TTGGTCTTTGCTTTT 929

Db 17 TTGGTCTTTGACTTGT 2

RESULT 407

ABV79664/C

ID ABV79664 standard; DNA; 17 BP.

AC ABV79664;

DT 03-JAN-2003 (first entry)

XX Human HTPL scanning oligonucleotide SEQ ID 910.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

OS Homo sapiens.

PN EP1229046-A2.

PD 07-AUG-2002.

XX 28-JAN-2002; 2002EP-00001167.

XX 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 23-MAY-2001; 2001US-00864761.

PR 09-OCT-2001; 2001US-0327898P.

XX (AEOM-) AEOMICA INC.

XX Zhan J;

XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.

XX Example 2; Page 183; 718pp; English.

XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention

XX Sequence 17 BP; 4 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4.2e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 749 TGTGCACTGCGATGC 764

Db 17 TGTTCACCTGCCAGGC 2

RESULT 408

ABV79665/C

ID ABV79665 standard; DNA; 17 BP.

AC ABV79665;

DT 03-JAN-2003 (first entry)

XX Human HTPL scanning oligonucleotide SEQ ID 911.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

OS Homo sapiens.

PN EP1229046-A2.

PD 07-AUG-2002.

XX 28-JAN-2002; 2002EP-00001167.

XX 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 23-MAY-2001; 2001WO-US000669.

PR 09-OCT-2001; 2001US-0327898P.

XX (AEOM-) AEOMICA INC.

XX Zhan J;

XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.

PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
XX Example 2; Page 183; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
XX Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 749 TGTGACCTGCCATGC 764
DB 16 TGTTCACCTGCCAGC 1
RESULT 409
ABV83096/c
ID ABV83096 standard; DNA; 17 BP.
XX
XX AC ABV83096;
XX
XX DT 03-JAN-2003 (first entry)
XX
XX DE Human HTPL scanning oligonucleotide SEQ ID 4342.
XX
XX KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX OS Homo sapiens.
XX
XX EN EP1229046-A2.
XX
XX PD 07-AUG-2002.
XX
XX PF 28-JAN-2002; 2002EP-00001167.
XX
XX PR 30-JAN-2001; 2001WO-US000663.
XX
XX PR 30-JAN-2001; 2001WO-US000664.
XX
XX PR 30-JAN-2001; 2001WO-US000665.
XX
XX PR 30-JAN-2001; 2001WO-US000666.
XX
XX PR 30-JAN-2001; 2001WO-US000667.
XX
XX PR 23-MAY-2001; 2001US-00864761.
XX
XX PR 09-OCT-2001; 2001US-0327898P.
XX
XX PA (AEOM-) AEOMICA INC.
XX
XX PI Zhan J;
XX
XX WPI; 2002-676582/73.

XX
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
XX Example 2; Page 633; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
XX Sequence 17 BP; 9 A; 4 C; 2 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 914 TTGGTCTTTGCTTTT 929
DB 16 TTGGTCTTTGACTTGT 1
RESULT 410
ABV80008/c
ID ABV80008 standard; DNA; 17 BP.
XX
XX AC ABV80008;
XX
XX DT 03-JAN-2003 (first entry)
XX
XX DE Human HTPL scanning oligonucleotide SEQ ID 1254.
XX
XX KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX OS Homo sapiens.
XX
XX EN EP1229046-A2.
XX
XX PD 07-AUG-2002.
XX
XX PF 28-JAN-2002; 2002EP-00001167.
XX
XX PR 30-JAN-2001; 2001WO-US000663.
XX
XX PR 30-JAN-2001; 2001WO-US000664.
XX
XX PR 30-JAN-2001; 2001WO-US000665.
XX
XX PR 30-JAN-2001; 2001WO-US000666.
XX
XX PR 30-JAN-2001; 2001WO-US000667.
XX
XX PR 23-MAY-2001; 2001US-00864761.
XX
XX PR 09-OCT-2001; 2001US-0327898P.
XX
XX PA (AEOM-) AEOMICA INC.
XX
XX PI Zhan J;
XX
XX WPI; 2002-676582/73.

```

XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTPL.
XX
XX Example 2; Page 228; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
XX protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
XX has two isoforms, with a few single base pair differences between the
XX two. One of the single base pair changes introduces a premature stop
XX codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX shares an overall structure organisation with the Patched protein. The
XX shared structural features strongly imply that HTPL plays a role similar
XX to that of Patched, and is a potential tumour suppressor. HTPL is
XX important in regulating male germ cell development, and the HTPL gene was
XX mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX useful for diagnosing a disorder caused by mutation in HTPL, and in
XX therapy and manufacture of a medicament for treatment or prevention of
XX HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
XX skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX clinically useful diagnostic markers and potential therapeutic agents for
XX male infertility and cancer. The present oligonucleotide was used in an
XX example from the invention
XX
XX Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 727 TCCACGAGGAGAACAGCA 742
XX ||||| |||||
XX Db 17 TCCACGAGGAGAACAGCA 2
XX
XX RESULT 411
XX ABV80009/c
XX ID ABV80009 standard; DNA; 17 BP.
XX
XX AC ABV80009;
XX
XX DT 03-JAN-2003 (first entry)
XX
XX DE Human HTPL scanning oligonucleotide SEQ ID 1255.
XX
XX KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX OS Homo sapiens.
XX
XX FN RP1229046-A2.
XX
XX PD 07-AUG-2002.
XX
XX PF 28-JAN-2002; 2002EP-00001167.
XX
XX PR 30-JAN-2001; 2001WO-US000663.
XX
XX PR 30-JAN-2001; 2001WO-US000664.
XX
XX PR 30-JAN-2001; 2001WO-US000665.
XX
XX PR 30-JAN-2001; 2001WO-US000667.
XX
XX PR 30-JAN-2001; 2001WO-US000668.
XX
XX PR 30-JAN-2001; 2001WO-US000669.
XX
XX PR 23-MAY-2001; 2001US-00864761.
XX
XX PR 09-OCT-2001; 2001US-0327898P.
XX
XX PA (AEOM-) AEOMICA INC.
XX
XX Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTPL.
XX
XX Example 2; Page 228; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
XX protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
XX has two isoforms, with a few single base pair differences between the
XX two. One of the single base pair changes introduces a premature stop
XX codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX shares an overall structure organisation with the Patched protein. The
XX shared structural features strongly imply that HTPL plays a role similar
XX to that of Patched, and is a potential tumour suppressor. HTPL is
XX important in regulating male germ cell development, and the HTPL gene was
XX mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX useful for diagnosing a disorder caused by mutation in HTPL, and in
XX therapy and manufacture of a medicament for treatment or prevention of
XX HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
XX skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX clinically useful diagnostic markers and potential therapeutic agents for
XX male infertility and cancer. The present oligonucleotide was used in an
XX example from the invention
XX
XX Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 727 TCCACGAGGAGAACAGCA 742
XX ||||| |||||
XX Db 16 TCCACGAGGAGAACAGCA 1
XX
XX RESULT 412
XX ABK19288
XX ID ABK19288 standard; RNA; 17 BP.
XX
XX AC ABK19288;
XX
XX DT 09-APR-2002 (first entry)
XX
XX DE Human ERG Amberzyme target sequence Seq ID No 1935.
XX
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX amberzyme.
XX
XX OS Homo sapiens.
XX
XX PN WO200188124-A2.
XX
XX PD 22-NOV-2001.
XX
XX PF 16-MAY-2001; 2001WO-US015866.
XX
XX PR 16-MAY-2000; 2000US-00572021.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.

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PA (GLAX ) GLAXO GROUP LTD.
XX
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX
XX WPI; 2002-082995/11.
XX
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX Claim 4; Page 125; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX
XX Sequence 17 BP; 3 A; 6 C; 4 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 68.8%; Pred. No. 4.2e+02;
XX Matches 11; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1171 AACUUGGCGTCCCC 1186
XX |||:::| ||| |||
XX Db 1 AACUUGGCGGCCCC 16
XX
XX RESULT 413
XX ABK19007
XX ID ABK19007 standard; RNA; 17 BP.
XX
XX AC ABK19007;
XX
XX DT 09-APR-2002 (first entry)
XX
XX DE Human ERG DNAzyme target sequence Seq ID No 1654.
XX
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; incozyme;
XX amberzyme.
XX
XX OS Homo sapiens.
XX
XX PN WO200188124-A2.
XX
XX
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PD 22-NOV-2001.
XX
XX PF 16-MAY-2001; 2001WO-US015866.
XX
XX PR 16-MAY-2000; 2000US-00572021.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX (GLAX ) GLAXO GROUP LTD.
XX
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX
XX DR Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX PS Claim 4; Page 106; 149pp; English.
XX
XX CC The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX
XX Sequence 17 BP; 5 A; 8 C; 1 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 4.2e+02;
XX Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1057 GCCCCAAACCCAGCT 1072
XX ||| ||| ||| |||
XX Db 2 GCCCCAAACCCAUACU 17
XX
XX RESULT 414
XX ABL31567/C
XX ID ABL31567 standard; DNA; 17 BP.
XX
XX AC ABL31567;
XX
XX DT 21-MAR-2002 (first entry)
XX
XX DE Human HLA genotyping oligonucleotide SEQ ID NO 1056.
XX
XX KW Human; human leukocyte antigen; HLA; genotype; polymorphism;
XX immunogenetic; transplantation; genetic disease; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200192572-A1.
XX
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PD 06-DEC-2001.
 XX
 PF 01-JUN-2001; 2001WO-JP004662.
 XX
 PR 01-JUN-2000; 2000JP-00164798.
 XX
 XX (NISN) NISSHINBO IND INC.
 PA (SYST-) SYSTEM RES INC.
 XX
 XX Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;
 XX WPI; 2002-122074/16.
 XX
 XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
 PT individuals e.g. by determining immunogenetic differences when
 PT transplanting between them.
 XX
 XX Claim 10; Page 293; 345pp; Japanese.
 XX
 XX The invention relates to a typing kit for judging human leukocyte antigen
 CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
 CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of
 CC genes e.g. belonging to HLA class I antigens on human genome and
 CC containing gene polymorphisms as allantoic acids have been immobilised as
 CC primers for amplification of cleaved nucleic acids relating to gene
 CC polymorphisms. The method is useful for judging HLA genotypes of
 CC individuals by determining immunogenetic differences before transplanting
 CC between them, providing genetic information to decide compatibility of
 CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
 CC pancreas, Langerhans islet in pancreas and cornea, susceptibility
 CC diagnosis of genetic diseases and identifying individuals
 XX
 XX Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 753 CACCTGCCATGCAGGT 768
 DB |||||
 17 CACGTGCCATGCAGGT 2
 RESULT 415
 AAD48146/c
 ID AAD48146 standard; DNA; 17 BP.
 XX
 AC AAD48146;
 XX
 XX 24-FEB-2003 (first entry)
 XX
 XX DNA P target DNA used in the exemplification of the invention.
 XX
 XX Peptide nucleic acid; PNA; nucleic acid zygosity; genetic analysis;
 KW scientific investigation; pharmacogenomic; pharmacogenetic; epigenomic;
 KW ss.
 XX
 XX Unidentified.
 OS
 XX WO200272865-A2.
 FN
 XX 19-SEP-2002.
 PD
 XX 09-MAR-2002; 2002WO-US007050.
 XX
 XX 09-MAR-2001; 2001US-0274547P.
 XX
 XX (BOST-) BOSTON PROBES INC.
 PA
 XX Coull JM, Fiandaca MJ, Kristjanson MD, Hyldig-Nielsen JJ;
 PI Creasey TM;
 XX WPI; 2003-018741/01.
 DR

XX Composition for determining target sequence of contiguous nucleobases,
 PT comprises polynucleobase strand and combination oligomer comprising first
 PT and second oligomer blocks that are covalently linked to each other.
 XX
 XX Example 1; Page 58; 149pp; English.
 XX
 XX The present invention relates to combination oligomers, including block
 CC synthesis of combination of oligomers in the absence of a template. The
 CC invention relates to a composition comprising a polynucleobase strand and
 CC a combination oligomer comprising first and second oligomer blocks that
 CC are each independently a peptide nucleic acid (PNA) covalently linked to
 CC each other by a linker of at least three atoms in length, where the
 CC oligomer blocks are sequences specifically hybridised to a target
 CC sequence of contiguous nucleobases in the polynucleobase strand, to form
 CC a double stranded target sequence-oligomer complex. The composition is
 CC used for determining a target sequence of contiguous nucleobases and for
 CC determining the zygosity of a nucleic acid for a single nucleotide
 CC polymorphism (SNP). The methods are useful in scientific investigation,
 CC e.g., for detection, identification and/or enumeration of bacteria,
 CC viruses and pathogens in food, beverages, water, pharmaceutical products,
 CC personal care products, dairy products, in clinical samples or in samples
 CC of plant, animal, human or environmental origin. They are also useful for
 CC the analysis of raw materials, equipment, products or processes used to
 CC manufacture or store food, beverages, water, pharmaceutical products,
 CC personal care products dairy products or environmental samples. The
 CC methods and materials are useful in areas such as expression analysis,
 CC SNP analysis, genetic analysis of humans, animals, fungi, yeast viruses
 CC and plants, therapy monitoring, pharmacogenomics, pharmacogenetics,
 CC epigenomics and high throughput screening operations. The present
 CC sequence is a target DNA used in the exemplification of the invention
 XX
 XX Sequence 17 BP; 2 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1136 CCTCCAGCTCCACCTA 1151
 DB |||||
 16 CCACGAGCTCCACCTA 1
 RESULT 416
 ABT38079
 ID ABT38079 standard; DNA; 17 BP.
 XX
 AC ABT38079;
 XX
 XX 12-JUN-2003 (first entry)
 XX
 XX Tumour suppression related human fukutin oligo SEQ ID No 3716.
 XX
 XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 XX Homo sapiens.
 OS
 XX WO2003025175-A2.
 FN
 XX 27-MAR-2003.
 PD
 XX 17-SEP-2002; 2002WO-IB004208.
 XX
 XX 17-SEP-2001; 2001FR-00011978.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 XX Teierman A, Amson R, Tuijnder M;
 PI WPI; 2003-313353/30.
 DR

radiation therapy; inflammatory disease; asthma; diabetes;
 rheumatoid arthritis; restenosis; Crohn's disease; obesity;
 gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 transplant/graft rejection; reperfusion injury; glomerulonephritis;
 allergic airway inflammation; inflammatory bowel disease; infection; ss.
 Synthetic.
 US2002177568-A1.
 28-NOV-2002.
 23-MAY-2001; 2001US-00864785.
 07-DEC-1992; 92US-00987132.
 18-MAY-1994; 94US-00245466.
 15-AUG-1994; 94US-00291932.
 23-DEC-1996; 96US-00777916.
 (STIN/) STINCHOMB D T.
 (MCSW/) MCSWIGGEN J.
 (DRAP/) DRAPER K G.
 Stinchcomb DT, Mcswiggen J, Draper KG;
 WPI; 2003-340953/32.
 Novel enzymatic nucleic acid molecules which down regulates expression of
 a sequence encoding a subunit of nuclear factor kappa B useful for
 treating cancer, inflammatory disorders and autoimmune diseases.
 Claim 3; Page 47; 72pp; English.
 The invention describes an enzymatic nucleic acid molecule (I) which down
 regulates expression of a sequence encoding a subunit of nuclear factor
 kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
 configuration. The enzymatic nucleic acid molecule is adapted to treat
 cancer and is useful for down-regulating REL-A activity in a cell, for
 treating a patient having a condition associated with the level of REL-A.
 (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 antisense nucleic acid molecules are useful for treating breast, lung,
 prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 multidrug resistant cancer. The method involves use of other drug
 therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 chemotherapies including paclitaxel, docetaxel, cisplatin, methotrexate,
 cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
 gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 acid molecules are also useful for treating inflammatory disease such as
 rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 rejection, gene therapy applications, ischaemia/reperfusion injury
 (central nervous system (CNS) and myocardial), glomerulonephritis,
 sepsis, allergic airway inflammation, inflammatory bowel disease or
 infection. This sequence represents an enzymatic nucleic acid used to
 modulate the function of a necrosis factor kappa B sub-unit
 Sequence 17 BP; 4 A; 3 C; 7 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1105 GGCTTCAGTCCCGTGC 1120
 |||||
 Db 17 GCCTTCATCCCTGC 2
 RESULT 419
 ACA06571
 ID ACA06571 standard; RNA; 17 BP.
 XX

ACA06571;
 03-JUN-2003 (first entry)
 NFkB sub-unit modulating inozyme substrate #390.
 Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
 G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
 lung cancer; prostate cancer; colorectal cancer; brain cancer;
 oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
 gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 transplant/graft rejection; reperfusion injury; glomerulonephritis;
 allergic airway inflammation; inflammatory bowel disease; infection; ss.
 Homo sapiens.
 US2002177568-A1.
 28-NOV-2002.
 23-MAY-2001; 2001US-00864785.
 07-DEC-1992; 92US-00987132.
 18-MAY-1994; 94US-00245466.
 15-AUG-1994; 94US-00291932.
 23-DEC-1996; 96US-00777916.
 (STIN/) STINCHOMB D T.
 (MCSW/) MCSWIGGEN J.
 (DRAP/) DRAPER K G.
 Stinchcomb DT, Mcswiggen J, Draper KG;
 WPI; 2003-340953/32.
 Novel enzymatic nucleic acid molecules which down regulates expression of
 a sequence encoding a subunit of nuclear factor kappa B useful for
 treating cancer, inflammatory disorders and autoimmune diseases.
 Claim 3; Page 33; 72pp; English.
 The invention describes an enzymatic nucleic acid molecule (I) which down
 regulates expression of a sequence encoding a subunit of nuclear factor
 kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
 configuration. The enzymatic nucleic acid molecule is adapted to treat
 cancer and is useful for down-regulating REL-A activity in a cell, for
 treating a patient having a condition associated with the level of REL-A.
 (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 antisense nucleic acid molecules are useful for treating breast, lung,
 prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 multidrug resistant cancer. The method involves use of other drug
 therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 chemotherapies including paclitaxel, docetaxel, cisplatin, methotrexate,
 cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
 gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 acid molecules are also useful for treating inflammatory disease such as
 rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 rejection, gene therapy applications, ischaemia/reperfusion injury
 (central nervous system (CNS) and myocardial), glomerulonephritis,
 sepsis, allergic airway inflammation, inflammatory bowel disease or
 infection. This sequence represents the substrate of a novel enzymatic
 nucleic acid molecule
 Sequence 17 BP; 4 A; 10 C; 2 G; 0 T; 1 U; 0 Other;
 SQ

therapies such as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate, gemcitabine or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, reperfusion injury rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents the substrate of a novel enzymatic nucleic acid molecule

Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 4.2e+02;
 Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1053 CCTGGCCCCCAAGCCCA 1068
 Db 2 CCUGCCCCCAAGCCCA 17

RESULT 420
 ACA06765
 ID ACA06765 standard; RNA; 17 BP.
 AC ACA06765;
 XX
 XX 03-JUN-2003 (first entry)
 DE NFKB sub-unit modulating inozyme substrate #584.
 KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
 KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; human;
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2002177568-A1.
 PN
 XX 28-NOV-2002.
 PD
 XX 23-MAY-2001; 2001US-00864785.
 XX
 XX 07-DEC-1992; 92US-00987132.
 PR 18-MAY-1994; 94US-00245466.
 PR 15-AUG-1994; 94US-00291932.
 PR 23-DEC-1996; 96US-00777916.
 XX
 XX (STIN/) STINCHOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 XX
 PI Stinchcomb DT, Mcswiggen J, Draper KG;
 XX
 XX WPI; 2003-340953/32.
 DR
 XX Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
 PT
 XX Claim 3; Page 35; 72pp; English.
 PS
 XX The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberyne configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially Mg²⁺. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or multidrug resistant cancer. The method involves use of other drug

Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 4.2e+02;
 Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1252 CCCATCCCCCAACCCCC 1267
 Db 1 CCCAUCUCCCAUCCUCC 16

RESULT 421
 ACA06256
 ID ACA06256 standard; RNA; 17 BP.
 AC ACA06256;
 XX
 XX 03-JUN-2003 (first entry)
 DE NFKB sub-unit modulating inozyme substrate #75.
 XX
 KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
 KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; human;
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2002177568-A1.
 PN
 XX 28-NOV-2002.
 PD
 XX 23-MAY-2001; 2001US-00864785.
 XX
 XX 07-DEC-1992; 92US-00987132.
 PR 18-MAY-1994; 94US-00245466.
 PR 15-AUG-1994; 94US-00291932.
 PR 23-DEC-1996; 96US-00777916.
 XX
 XX (STIN/) STINCHOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 XX
 PI Stinchcomb DT, Mcswiggen J, Draper KG;
 XX
 XX WPI; 2003-340953/32.
 DR
 XX Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
 PT
 XX Claim 3; Page 35; 72pp; English.
 PS
 XX The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberyne configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially Mg²⁺. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or multidrug resistant cancer. The method involves use of other drug

```

PS Claim 3; Page 28; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg2+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 11 C; 3 G; 0 T; 1 U; 0 Other;
    Query Match      0.6%; Score 12.8; DB 1; Length 17;
    Best Local Similarity 81.2%; Pred. No. 4.2e+02;
    Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1085 CAGGCTTCACCCCCAC 1100
DB 1 CGGCCCCACCCCCAC 16
    |||||:|||||
    |||||:|||||

RESULT 422
ID ACA06763
AC ACA06763;
XX
XX ACA06763;
XX
XX 03-JUN-2003 (first entry)
XX
XX NFkB sub-unit modulating inozyme substrate #582.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
XX US2002177568-A1.
XX
XX 28-NOV-2002.
XX
XX 23-MAY-2001; 2001US-00864785.
XX
XX 07-DEC-1992; 92US-00987132.
XX
XX 18-MAY-1994; 94US-00245466.
XX
XX 15-AUG-1994; 94US-00291932.
XX
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHOMB D T.
PA (MCSW/) MCSWIGGEN J.
XX (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
XX WPI, 2003-340953/32.
XX
XX Novel enzymatic nucleic acid molecules which down regulates expression of
XX a sequence encoding a subunit of nuclear factor kappa B useful for
XX treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX Claim 3; Page 35; 72pp; English.
XX
XX The invention describes an enzymatic nucleic acid molecule (I) which down
XX regulates expression of a sequence encoding a subunit of nuclear factor
XX kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
XX configuration. The enzymatic nucleic acid molecule is adapted to treat
XX cancer and is useful for down-regulating REL-A activity in a cell, for
XX treating a patient having a condition associated with the level of REL-A.
XX (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
XX the presence of a divalent cation, especially Mg2+. The enzymatic and
XX antisense nucleic acid molecules are useful for treating breast, lung,
XX prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
XX cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
XX multidrug resistant cancer. The method involves use of other drug
XX therapies such as monoclonal antibodies, REL-A-specific inhibitors or
XX chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate or
XX cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
XX gemcitabine or radiation therapy. The enzymatic and antisense nucleic
XX acid molecules are also useful for treating inflammatory disease such as
XX rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
XX obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
XX rejection, gene therapy applications, ischaemia/reperfusion injury
XX (central nervous system (CNS) and myocardial), glomerulonephritis,
XX sepsis, allergic airway inflammation, inflammatory bowel disease or
XX infection. This sequence represents the substrate of a novel enzymatic
XX nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 12 C; 0 G; 0 T; 3 U; 0 Other;
    Query Match      0.6%; Score 12.8; DB 1; Length 17;
    Best Local Similarity 81.2%; Pred. No. 4.2e+02;
    Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1251 CCCATCCCCCAACCCC 1266
DB 2 CCCCAUCCCCCAUCCUC 17
    |||||:|||||
    |||||:|||||

RESULT 423
ADB04345/C
ID ADB04345 standard; DNA; 17 BP.
XX
XX ADB04345;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ7 scanning oligonucleotide SEQ ID 5331.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX

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PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
XX (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PA MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PA MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 5331; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1021 GAGGGGAGCTTGAAG 1036
DB 16 GAGGTGGAGCTTGCG 1
RESULT 424
ADB04344/c
ID ADB04344 standard; DNA; 17 BP.
XX
XX ADB04344;
AC
XX
XX 20-NOV-2003 (first entry)
DT
XX
XX Human MDZ7 scanning oligonucleotide SEQ ID 5330.
DE
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX
XX EPI281758-A2.
PN
XX
XX 05-FEB-2003.
PD
XX
XX 30-JUL-2002; 2002EP-00016874.
PF
XX
XX 02-AUG-2001; 2001US-00922181.
PR
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Shannon M, Gu Y, Nguyen C;
PI
XX
XX Example 8; SEQ ID NO 6101; 103pp; English.
PS

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DR WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PA MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5330; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 4 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1021 GAGGGGAGCTTGAAG 1036
DB 17 GAGGTGGAGCTTGCG 2
RESULT 425
ADB05115
ID ADB05115 standard; DNA; 17 BP.
XX
XX ADB05115;
AC
XX
XX 20-NOV-2003 (first entry)
DT
XX
XX Human MDZ12 scanning oligonucleotide SEQ ID 6101.
DE
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX
XX EPI281758-A2.
PN
XX
XX 05-FEB-2003.
PD
XX
XX 30-JUL-2002; 2002EP-00016874.
PF
XX
XX 02-AUG-2001; 2001US-00922181.
PR
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Shannon M, Gu Y, Nguyen C;
PI
XX
XX WPI; 2003-423107/40.
DR
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PA MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 6101; 103pp; English.
PS

```


XX SQ Sequence 17 BP; 5 A; 1 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 990 CATTGTTTGTGGGAAA 1005
 ||||| ||||| |||||
 Db 2 CATTGAGTGTGGGAAA 17

RESULT 428
 ADA99614/c
 ID ADA99614 standard; DNA; 17 BP.
 XX AC ADA99614;
 XX DT 20-NOV-2003 (first entry)
 XX DE Human MDZ3 scanning oligonucleotide SEQ ID 603.
 XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX OS Homo sapiens.
 XX PN EP1281758-A2.
 XX PD 05-FEB-2003.
 XX PF 30-JUL-2002; 2002EP-00016874.
 XX PR 02-AUG-2001; 2001US-00922181.
 XX FA (ABOM-) ABOMICA INC.
 XX PI Shannon M, Gu Y, Nguyen C;
 XX WPI; 2003-423107/40.
 XX DR New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MDZ3,
 PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
 XX Example 8; SEQ ID NO 603; 103pp; English.
 XX The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
 CC encoded at chromosome 7q22.1. MDZ4 is encoded at chromosome 6p21.3-22.2,
 CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
 CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MDZ3,
 CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 XX SQ Sequence 17 BP; 4 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1085 CAGGCTTACCCCCAC 1100

Db 16 CAGGCTTAACTCCAC 1
 ||||| ||||| ||||| |||||
 RESULT 429
 ABZ64922/c
 ID ABZ64922 standard; RNA; 17 BP.
 XX AC ABZ64922;
 XX DT 21-MAR-2003 (first entry)
 XX DE Human HER2 DNzyme substrate #379.
 XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
 KW anti-rheumatic; cancer; AIDS; ss.
 XX OS Homo sapiens.
 XX PN WO200297114-A2.
 XX PD 05-DEC-2002.
 XX PF 29-MAY-2002; 2002WO-US016840.
 XX PR 29-MAY-2001; 2001US-0294140P.
 XX PR 06-JUN-2001; 2001US-0296249P.
 XX PR 10-SEP-2001; 2001US-0318471P.
 XX FA (RIBO-) RIBOZYME PHARM INC.
 XX PI Mcswiggen J;
 XX WPI; 2003-140484/13.
 XX DR Novel short interfering RNA and enzymatic nucleic acid useful for
 PT treating cancer, modulates the expression of a nucleic acid encoding
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
 XX Claim 4; Page 140; 185pp; English.
 XX The invention relates to a novel short interfering RNA (siRNA) nucleic
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
 CC rheumatic activity. The nucleic acid molecules are useful for reducing
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ66531, ABZ66520 - ABZ66524,
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
 CC ribozymes of the invention
 XX SQ Sequence 17 BP; 2 A; 6 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 739 CAGAACCCCGTGTGCA 754
 ||||| ||||| ||||| |||||
 Db 16 CAGGGCACCGGTGTGCA 1

RESULT 430
 ABZ61891/c
 ID ABZ61891 standard; RNA; 17 BP.
 XX AC ABZ61891;
 XX DT 21-MAR-2003 (first entry)

```
XX Human H-Ras DNzyme target #682.
DE
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
XX
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX
XX 06-JUN-2001; 2001US-0296249P.
XX
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 124; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytosolic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1293 CAGGCCACAGGCGTA 1308
DB 16 CAGGCCACAGGCGGA 1
RESULT 431
ABZ60690
ID ABZ60690 standard; RNA; 17 BP.
XX
XX ABZ60690;
AC
XX
XX 21-MAR-2003 (first entry)
XX
XX Human K-Ras DNzyme substrate #802.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
XX
XX Mcswiggen J;
XX
```

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PD 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX
XX 06-JUN-2001; 2001US-0296249P.
XX
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 100; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytosolic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 5 A; 2 C; 2 G; 0 T; 8 U; 0 Other;
SQ
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 43.8%; Pred. No. 4.2e+02;
Matches 7; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
QY 939 CUTCATTGGTTTAAATG 954
DB 2 CUUCAUUGUUUUUUAAG 17
RESULT 432
ABZ64908/c
ID ABZ64908 standard; RNA; 17 BP.
XX
XX ABZ64908;
AC
XX
XX 21-MAR-2003 (first entry)
XX
XX Human HER2 DNzyme substrate #365.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX
XX 06-JUN-2001; 2001US-0296249P.
XX
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
XX
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XX DR WPI; 2003-140484/13.
XX
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX PS Claim 4; Page 140; 185pp; English.
XX
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX
XX SQ Sequence 17 BP; 3 A; 3 C; 8 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 1110 CAGTCCCGTCCCGAGT 1125
Db 16 CAGTCCACTGCCAGT 1
XX
XX RESULT 433
XX ACD63373/c
XX ID ACD63373 standard; RNA; 17 BP.
XX AC ACD63373;
XX
XX DT 30-SEP-2003 (first entry)
XX
XX DE HCV minus strand DNazyme substrate sequence #1012.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.
XX
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEBP/) LEE P.
XX
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX XX WPI; 2003-229207/22.
XX
XX PT Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX
XX PS Claim 1; Page 293; 387pp; English.
XX
XX CC The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HCV
XX CC DNazyme or minus strand DNazyme sequences disclosed in the present
XX CC invention
XX
XX SQ Sequence 17 BP; 2 A; 3 C; 9 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 1086 AGGCTTCACCCCCACC 1101
Db 17 AGGCTCCACCCCCATC 2
XX
XX RESULT 434
XX ACD62296/c
XX ID ACD62296 standard; RNA; 17 BP.
XX AC ACD62296;
XX
XX DT 23-SEP-2003 (first entry)
XX
XX DE HCV minus strand DNazyme substrate sequence #495.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.
XX
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX

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PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 283; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, ambersymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNzyme or minus strand DNzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1117 GTGCCAGTTCACCT 1132
Db 16 GTGCCAGTTCACCT 1
RESULT 435
ACD54753/C
ID ACD54753 standard; RNA; 17 BP.
XX
AC ACD54753;
XX
DT 24-SEP-2003 (first entry)
DE HBV DNzyme substrate sequence #108.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW ambersyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.

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XX Hepatitis B virus.
OS
XX
PN W0200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Example 1; Page 188; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, ambersymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or ambersyme sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 5 A; 2 C; 5 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1042 ACTACTAAGCCCTGG 1057
Db 17 ACTACTAATTCCTGG 2
RESULT 436
ACCG4156
ID ACCG4156 standard; DNA; 17 BP.
XX
AC ACCG4156;
XX
DT 01-JUL-2003 (first entry)

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RESULT 437	
ADB98958/c	
ID ADB98958 standard; DNA; 17 BP.	
XX	
XX	
AC ADB98958;	
XX	
DT 04-DEC-2003 (first entry)	
XX	
DE LRP5 mutagenic PCR primer #77.	
XX	
XX Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;	
KW bone mass modulation; osteoporosis; PCR; primer; ss.	
XX	
OS Synthetic.	
XX	
PN WC200292000-A2.	
XX	
PD 21-NOV-2002.	
XX	
PF 13-MAY-2002; 2002WO-US014877.	
XX	

xx New nucleic acid encoding human prostate membrane-specific antigen,
 PT PT
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 PT

XX PS Disclosure; Page 526; 771pp; French.

XX CC The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

XX CC Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.

XX CC Sequence 17 BP; 1 A; 7 C; 1 G; 8 T; 0 U; 0 Other;

XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 930 ATCCCTCTCTCTCAT 945
DB 2 ATCCCTCTCTCTCTT 17

RESULT 439
ADC03565
ID ADC03565 standard; DNA; 17 BP.
XX AC ADC03565;
XX 18-DEC-2003 (first entry)
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #12.
XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
KW NHELP1; passive replacement therapy; vaccine; diagnosis.
XX Homo sapiens.
XX EP1273660-A2.
XX 08-JAN-2003.
XX 25-JAN-2002; 2002EP-00001160.
XX 30-JAN-2001; 2001WO-US000666.
XX 23-MAY-2001; 2001US-00864761.
XX 21-DEC-2001; 2001US-0343331P.
XX (AEOM-) AEOMICA INC.
XX Gu Y;
XX WPI; 2003-302724/30.
XX New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.

XX Example 2; SEQ ID NO 52; 468pp; English.

XX CC The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid

CC The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid

CC Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 764 CAGGTTCTCTCTCTAAG 779
DB 2 CAGGTTCTCTCTCTAAG 17

RESULT 440
ADC03566
ID ADC03566 standard; DNA; 17 BP.
XX AC ADC03566;
XX 18-DEC-2003 (first entry)
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #13.
XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
KW NHELP1; passive replacement therapy; vaccine; diagnosis.
XX Homo sapiens.
XX EP1273660-A2.
XX 08-JAN-2003.
XX 25-JAN-2002; 2002EP-00001160.
XX 30-JAN-2001; 2001WO-US000666.
XX 23-MAY-2001; 2001US-00864761.
XX 21-DEC-2001; 2001US-0343331P.
XX (AEOM-) AEOMICA INC.
XX Gu Y;
XX WPI; 2003-302724/30.
XX New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.

XX Example 2; SEQ ID NO 53; 468pp; English.

XX CC The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid

CC or protein is useful as passive replacement therapy, as a vaccine, or in
CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
CC spanning the sequence of the human NHEPL1 gene (ADC03514).

XX SQ Sequence 17 BP; 4 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4.2e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 764 CAGGTTTCTTTCTAAG 779

Db 1 CAGGTTTCTTTCTAAG 16

RESULT 441

ADB44188/c

ID ADB44188 standard; DNA; 17 BP.

XX ADB44188;

XX 18-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #4511.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX primer; probe; tumour suppression; tumour reversion; apoptosis;
XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.
XX Disclosure; Page 559; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences,
XX fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX sequence having at least 80% identity, after optimal alignment, with the
XX nucleotides, a sequence that hybridizes under stringent conditions with
XX the nucleotides, or the complement, or corresponding RNA, of the
XX nucleotides. The nucleotides are used as probes or primers for detecting,
XX identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX sense and antisense sequences, of nucleotides involved in tumour
XX suppression or reversion, apoptosis and/or viral resistance, to produce
XX recombinant polypeptides, and to prepare transgenic animals, as
XX experimental models. The nucleotides (also vectors containing them and
XX cells containing the vectors), the encoded polypeptides and antibodies
XX (Ab) against the polypeptide are useful for prevention and/or treatment
XX of viral infections or diseases characterized by development of tumours
XX or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX Analysis of the expression of the nucleotides can be used for diagnosis
XX and/or prognosis of these diseases. The nucleotides and polypeptides can
XX also be used to screen for their specific interactive molecules,
XX potentially useful for treating diseases associated with abnormal
XX expression of the nucleotides.

SQ Sequence 17 BP; 1 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4.2e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1290 CCACACAGCCACAGC 1305

Db 16 CCACACAGCCACAGATC 1

RESULT 442

AAQ74284/c

ID AAQ74284 standard; DNA; 18 BP.

XX AAQ74284;

XX 25-MAR-2003 (revised)

XX 12-JUN-1995 (first entry)

XX Amyloid precursor protein URA3 forward PCR primer.

XX Amyloid precursor protein; APP; URA3 PCR primer;
XX beta-amyloidosis animal models; Down's syndrome; Alzheimers disease;
XX yeast artificial chromosome; ss.

XX Synthetic.

XX WO9423049-A2.

XX 13-OCT-1994.

XX 01-APR-1994; 94WO-US003619.

XX 02-APR-1993; 93US-00042390.

XX (UYJO) UNIV JOHNS HOPKINS.

XX Gearhart JD, Lamb BT;

XX WPI; 1994-333207/41.

XX Introduction and expression of large genomic sequences in transgenic
XX animals - which may be used as animal models of beta-amyloidosis in
XX Alzheimer's disease and Down's syndrome.

XX Example 3; Page 32; 60pp; English.

XX AAQ74284 and AAQ74285 are the forward and reverse PCR primers for the
XX human amyloid precursor protein (APP) URA3, it was used to screen yeast
XX artificial chromosome (YAC) libraries for APP. Isolated APP clones were
XX then injected into blastocysts, from the same species as the embryonic
XX cells which contained the YAC library. Transgenic animals which could be
XX used as models of beta-amyloidosis (prevalent in individuals with Down's
XX syndrome and Alzheimers disease), were then generated from the injected
XX blastocysts. (Updated on 25-MAR-2003 to correct PN field.)

XX SQ Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 739 CAGAACCCGCTGTGCA 754

Db 18 CACCACACCGCTGTGCA 3

RESULT 443

AAV12463/c

ID AAV12463 standard; DNA; 18 BP.

XX AAV12463;

XX 15-MAY-1998 (first entry)
 DT Human HP4 prostaglandin receptor PCR antisense primer SEQ ID NO:8.
 XX
 DE Human HP4 prostaglandin receptor; adenylate cyclase; drug screening;
 XX cAMP; PCR primer; ss.
 KW
 KW Synthetic.
 XX OS Homo sapiens.
 OS
 XX US5716835-A.
 XX
 XX 10-FEB-1998.
 PD
 XX 05-MAY-1994; 94US-00239431.
 XX
 XX 05-MAY-1994; 94US-00239431.
 XX
 XX (ALLR) ALLERGAN INC.
 PA
 XX Woodward DF, Regan JW, Gil DW;
 XX WPI; 1998-144807/13.
 XX
 XX DNA encoding human HP4 prostaglandin receptor - useful for drug
 PT screening.
 XX
 XX Example 6; Col 10; 15pp; English.
 PS
 XX The present sequence represents a PCR primer used in the amplification of
 CC human HP4 prostaglandin receptor. Transfected cells, containing an HP4
 CC prostaglandin receptor expression vector, can be used to screen for
 CC substances that bind to the HP4 receptor, for substances that inhibit
 CC ligand binding to the HP4 receptor, and for HP4 receptor agonists (based
 CC on increased cAMP production in cells pretreated with a phosphodiesterase
 CC inhibitor)
 XX
 XX Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 912 CTTTGGTCTTGGCCT 927
 DB 17 CTTGGTCTTGGCAT 2
 RESULT 444
 AAV72786/C
 ID AAV72786 standard; DNA; 18 BP.
 XX
 XX AAV72786;
 AC
 XX 17-FEB-1999 (first entry)
 DT
 DE Corn kernel oil concentration controlling loci marker s2097 primer 1.
 XX
 XX Corn; kernel oil; concentration; trait controlling loci; genetic marker;
 KW Zea mays; breeding; PCR primer; ss.
 KW
 XX Synthetic.
 OS
 OS Zea mays.
 XX
 XX WO9842870-A1.
 PN
 XX 01-OCT-1998.
 PD
 XX 19-MAR-1998; 98WO-US005550.
 PF
 XX 24-MAR-1997; 97US-0041515P.
 XX
 XX

PA (DUPO) DU PONT DE NEMOURS & CO E I.
 XX Reiter RS;
 XX WPI; 1998-609896/51.
 DR
 XX Breeding corn with increased oil concentration - comprises use of genetic
 PT markers to identify trait loci controlling kernel oil concentration.
 PT
 XX Example 2; Page 7; 50pp; English.
 PS
 XX A new method has been developed of breeding for corn with increased
 CC kernel oil concentration. The method comprises: (a) selecting a corn
 CC plant from a breeding population using at least one of the genetic
 CC markers s1375, s1384, s1394, s1416, s1422, s1432, s1457, s1480, s1476,
 CC s1478, s1484, s1500, s1513, s1529, s1544, s1545, s1630, s1633, s1647,
 CC s1750, s1756, s1757, s1772, s1774, s1780, s1797, s1813, s1816,
 CC s1817, s1836, s1853, s1860, s1870, s1921, s1922, s1925, s1931, s1933,
 CC s1939, s1946, s1949, s2054, s2055, s2057, s2058, s2097, s2122, s2125,
 CC s2150, s2156, and s2175; and (b) crossing the selected plant with a second
 CC plant and obtaining progeny with increased kernel oil concentration. Also
 CC described are: (1) a method for identifying corn plants or lines for use
 CC as parents to create a breeding population, comprising: (a) genotyping
 CC corn plants or lines with one or more of the above genetic markers; and
 CC (b) identifying plants or lines which are predicted to produce
 CC transgressive segregants for kernel oil concentration; and (2) trait loci
 CC controlling kernel oil concentration mapped by the above genetic markers,
 CC with the exception of s1480. AAV72694 to AAV72797 represent PCR primers
 CC which are used to amplify the genetic markers for use in the method of
 CC the invention
 XX
 XX Sequence 18 BP; 5 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1077 TCCCACTCCAGGCTTC 1092
 DB 16 TCTCACTCCAGGCTCC 1
 RESULT 445
 AAX28111/C
 ID AAX28111 standard; DNA; 18 BP.
 XX
 XX AAX28111;
 AC
 XX 11-JUN-1999 (first entry)
 DT
 DE PCR primer for M. kansasii KATS2 sequence.
 XX
 XX KATS2 sequence; Mycobacterium kansasii detection; probe; primer;
 KW microorganism detection; ds.
 KW
 XX Synthetic.
 OS
 OS Mycobacterium kansasii.
 XX
 XX EP905259-A1.
 PN
 XX 31-MAR-1999.
 PD
 XX 23-SEP-1998; 98EP-00118036.
 PF
 XX 25-SEP-1997; 97US-00937580.
 PR
 XX (BECT) BECTON DICKINSON & CO.
 XX
 XX Harris JM, You Q;
 PI
 XX WPI; 1999-192672/17.
 DR
 XX New Mycobacterium kansasii specific DNA fragment (KATS2) useful for
 PT

PT designing oligonucleotides which are useful for detecting M. kansasii
 PT nucleic acid in clinical samples.

XX Claim 2; Page 11; 36pp; English.

XX This sequence is a primer for a Mycobacterium kansasii KATS2 sequence of
 CC the invention. The KATS2 oligonucleotide is useful as a probe and a
 CC primer for detection of M. kansasii microorganisms or nucleic acids in
 CC veterinary and human clinical samples by hybridisation and amplification
 CC respectively. The KATS2 fragment was hybridized to genomic DNA from M.
 CC kansasii and non-M. kansasii species, and was found to hybridise to all
 CC six M. kansasii strains tested, and none of the 17 non-M. kansasii
 CC strains. The new oligonucleotides allows rapid, accurate and sensitive
 CC identification of all strains of M. kansasii, compared to prior art
 CC probes which only identify 73 % of M. kansasii strains (e.g. ACQU-PROBE),
 CC or fail to detect one distinct M. kansasii subgroup (e.g. PMK1-9)

XX Sequence 18 BP; 4 A; 0 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1134 CACCTCCAGCTCCACC 1149
 || ||||| |||||
 Db 16 CATCTCCATCTCCACC 1

RESULT 446

AAZ41037
 ID AAZ41037 standard; DNA; 18 BP.

AC AAZ41037;

XX 26-JAN-2000 (first entry)

DE Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #29.

XX Identification; genetic target; gene modulation; human; probe;
 KW antisense oligonucleotide; phosphorothioate; PCR primer;
 KW nucleotide sequence-based technology; antisense drug discovery;
 KW target validation; ss.

XX Synthetic.

OS Homo sapiens.

OS WO9953101-A1.

PN 21-OCT-1999.

XX 13-APR-1999; 99WO-US008268.

XX 13-APR-1998; 98US-0081483P.

PR 28-APR-1998; 98US-00067638.

XX (ISIS-) ISIS PHARM INC.

XX Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;

PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;

DR WPI; 1999-620446/53.

PT Identifying compounds which modulate expression of nucleic acids, used to
 PT provide compounds having defined physical, chemical or bioactive
 PT properties, e.g. antisense activity.

PS Example 21; Page 101; 264pp; English.

XX A method has been developed of defining a set of compounds that modulate
 CC the expression of a target nucleic acid (tRNA) sequence via binding of the
 CC compounds with the tRNA sequence. The method comprises generating a
 CC library of virtual compounds in silico according to defined criteria, and
 CC evaluating in silico the binding of the virtual compounds with the tNA
 CC according to defined criteria. Also described are: (1) a method of

CC according to defined criteria. Also described are: (1) a method of
 CC defining a set of oligonucleotides (ONs) that modulate the expression of
 CC a tNA sequence via binding of the ONs with the tNA sequence comprising
 CC generating a library of virtual compounds in silico according to defined
 CC criteria, and evaluating in silico the binding of the virtual ONs with
 CC the tNA according to defined criteria; and (2) a method of defining a set
 CC of compounds that modulate the expression of a tNA sequence via binding
 CC of the compounds with the tNA. The methods can be used for the generation
 CC and identification of synthetic compounds having defined physical,
 CC chemical or bioactive properties. Information gathered from assays of
 CC such compounds is used to identify nucleic acid sequences that are
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.
 CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
 CC AAY52701 to AAY52706, represent sequences used in the exemplification of
 CC the present invention

XX Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCTCTTC 942
 || ||||| |||||
 Db 1 TTTCTCTCTCTCTTC 16

RESULT 447

AAZ40886/C
 ID AAZ40886 standard; DNA; 18 BP.

AC AAZ40886;

XX 26-JAN-2000 (first entry)

DE Human CD40 phosphorothioate antisense oligonucleotide SEQ ID NO:35.

XX Identification; genetic target; gene modulation; human; probe;
 KW antisense oligonucleotide; phosphorothioate; PCR primer;
 KW nucleotide sequence-based technology; antisense drug discovery;
 KW target validation; ss.

XX Synthetic.

OS Homo sapiens.

OS WO9953101-A1.

PN 21-OCT-1999.

XX 13-APR-1999; 99WO-US008268.

XX 13-APR-1998; 98US-0081483P.

PR 28-APR-1998; 98US-00067638.

XX (ISIS-) ISIS PHARM INC.

XX Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;

PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;

DR WPI; 1999-620446/53.

PT Identifying compounds which modulate expression of nucleic acids, used to
 PT provide compounds having defined physical, chemical or bioactive
 PT properties, e.g. antisense activity.

PS Example 8; Page 77; 264pp; English.

XX A method has been developed of defining a set of compounds that modulate
 CC the expression of a target nucleic acid (tNA) sequence via binding of the
 CC compounds with the tNA sequence. The method comprises generating a
 CC library of virtual compounds in silico according to defined criteria, and
 CC evaluating in silico the binding of the virtual compounds with the tNA
 CC according to defined criteria. Also described are: (1) a method of

CC defining a set of oligonucleotides (ONs) that modulate the expression of
 CC a tNA sequence via binding of the ONs with the tNA sequence comprising
 CC generating a library of virtual compounds in silico according to defined
 CC criteria, and evaluating in silico the binding of the virtual ONs with
 CC the tNA according to defined criteria; and (2) a method of defining a set
 CC of compounds that modulate the expression of a tNA sequence via binding
 CC and identification of synthetic compounds having defined physical,
 CC chemical or bioactive properties. Information gathered from assays of
 CC such compounds is used to identify nucleic acid sequences that are
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.
 CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
 CC AAY52701 to AAY52706, represent sequences used in the exemplification of
 CC the present invention

SQ Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 743 ACACCGTGTGCACCTG 758

Db 17 ACACCACTGCACCTG 2

RESULT 448

AAZ31867

ID AAZ31867 standard; DNA; 18 BP.

XX AAZ31867;

DT 24-JAN-2000 (first entry)

DE Human G-alpha-13 antisense inhibitor ISIS# 20774.

XX G-alpha-13; human; inhibitor; cancer; antisense compound; therapy; ss.
 OS Synthetic.
 OS Homo sapiens.

PN US5981732-A.

XX 09-NOV-1999.

PD 04-DEC-1998; 98US-00205860.

PF 04-DEC-1998; 98US-00205860.

PR (ISIS-) ISIS PHARM INC.

XX Cowsert LM;

PI WPI; 1999-633376/54.

DR Antisense compound inhibiting expression of human G-alpha-13.

XX Example 15; Col 39; 38pp; English.

FS This sequence represents an antisense inhibitor of the invention, and
 XX inhibits the expression of the human G-alpha-13 protein. The antisense
 CC compounds of the invention are of 8 to 30 nucleobases in length, that
 CC inhibits the expression of the human G-alpha-13. The antisense compound
 CC is useful for treating an animal, particularly humans, having or being
 CC prone to a disease or condition associated with the expression of G-alpha
 CC -13, such as cancer

SQ Sequence 18 BP; 8 A; 3 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 806 ACTGTAAGAAAAGCCT 821

Db 3 ATTGTAAGAAAAGCCT 18

RESULT 449

AAZ22131

ID AAZ22131 standard; DNA; 18 BP.

XX AAZ22131;

AC AAZ22131;

XX 26-NOV-1999 (first entry)

DT Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23440.

DE Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic;

XX c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.

OS Synthetic.

OS Homo sapiens.

XX US5958771-A.

XX 28-SEP-1999.

XX 03-DEC-1998; 98US-00205144.

XX 03-DEC-1998; 98US-00205144.

PR (ISIS-) ISIS PHARM INC.

XX Bennett CF, Cowsert LM, Ackermann EJ;

XX WPI; 1999-561046/47.

XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2

XX useful for e.g. diagnostics, therapeutics, and as research reagents.

XX Example 15; Col 39; 33pp; English.

XX The invention provides antisense compounds of 8-30 nucleotides that
 CC inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-
 CC 2). The antisense compounds may be used for diagnostics, therapeutics
 CC (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent
 CC or delay infection, inflammation, or tumor formation), as research
 CC reagents (e.g. to distinguish between members of a biological pathway
 CC and in kits. Sequences AAZ22103-142 represent phosphorothioate
 CC oligonucleotides used for antisense inhibition of cellular inhibitor of
 CC apoptosis-2

XX Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 927 TTTATCCCTCCTCTTC 942

Db 1 TTTCTCTCTCCTCTTC 16

RESULT 450

AAZ47719/C

ID AAZ47719 standard; DNA; 18 BP.

XX AAZ47719;

AC AAZ47719;

XX 02-MAR-2000 (first entry)

DE Human CD40 antisense oligonucleotide SEQ ID NO:35.

XX Human; CD40; antisense oligonucleotide; phosphorothioate; modulation;
 XX expression; immune disease; inflammatory disease; immunomodulatory;

KW anti-inflammatory; anti-arthritis; anti-asthmatic; antiproliferative;
 KW anticancer; immuno-suppressive; anti-psoriatic; allograft rejection;
 KW hyperproliferative disease; autoimmune disease; rheumatoid arthritis;
 KW inflammatory bowel disease; asthma; psoriasis; cancer; tumour; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9957320-A1.
 XX
 XX 11-NOV-1999.
 PD
 XX PF 22-APR-1999; 99WO-US008765.
 XX PR 01-MAY-1998; 98US-00071433.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Bennett CF, Cowser LM;
 XX WPI; 2000-062159/05.
 DR
 XX
 XX Antisense molecules directed against nucleic acid encoding human CD40,
 PT for treating e.g. immune, inflammatory or hyperproliferative diseases.
 XX
 XX Claim 3; Page 44; 102pp; English.
 PS
 CC AAZ47768 to AAZ47769 represent phosphorothioate antisense
 CC oligonucleotides targeted to human CD40, which can be used to inhibit the
 CC expression of human CD40. CD40 is involved in lymphocyte activation,
 CC tumour growth and/or angiogenesis. Inhibition of CD40 is used to treat or
 CC prevent immune-associated diseases (specifically guest vs. host disease,
 CC allograft rejection or autoimmune diseases); inflammation (specifically
 CC asthma, rheumatoid arthritis, allograft rejection, inflammatory bowel
 CC disease or psoriasis) or hyperproliferation (specifically cancer and
 CC tumours). the antisense oligonucleotides are also useful as diagnostic
 CC and research reagents. AAZ47769 represents the human CD40 nucleotide
 CC sequence. AAZ47770 to AAZ47772 represent human CD40 forward and reverse
 CC PCR primers, and a human CD40 PCR probe, respectively. AAZ47773 to
 CC AAZ47775 represent other PCR primers and a probe used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02; Mismatches 0; Gaps 0;
 Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;
 QY 743 ACACCGGTGCACCTG 758
 Db |||||
 17 ACACCATCTGCACCTG 2
 RESULT 451
 AAZ75429/c
 ID AAZ75429 standard; DNA; 18 BP.
 AC
 XX AAZ75429;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker downstream amplification primer SEQ ID NO:9785.
 XX
 KW Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9954500-A2.
 XX

PD 28-OCT-1999.
 XX
 PF 21-APR-1999; 99WO-IB000822.
 XX
 PR 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.
 XX
 PA (GEST) GENSET.
 XX
 PI Cohen D, Blumenfeld M, Chumakov I;
 XX WPI; 2000-013267/01.
 DR
 XX Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.
 XX
 PS Claim 8; Page 2317; 2745pp; English.
 XX
 CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention
 XX
 SQ Sequence 18 BP; 5 A; 2 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02; Mismatches 0; Gaps 0;
 Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;
 QY 1138 TCCAGCTCCACCTATA 1153
 Db |||||
 17 TCCAACTCCACCTTTA 2
 RESULT 452
 AAZ69900/c
 ID AAZ69900 standard; DNA; 18 BP.
 AC
 XX AAZ69900;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker upstream amplification primer SEQ ID NO:4256.
 XX
 KW Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9954500-A2.
 XX
 PD 28-OCT-1999.
 XX
 PF 21-APR-1999; 99WO-IB000822.
 XX
 PR 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.
 XX
 PA (GEST) GENSET.
 XX

XX PI Cohen D, Blumenfeld M, Chumakov I;
 XX WPI; 2000-013267/01.
 XX Novel biallelic markers used to construct a high density disequilibrium
 XX map of the human genome.
 XX Claim 8; Page 1138; 2745pp; English.
 XX AA265654 to AA269578 represent human biallelic markers from the present
 XX invention, which contain a polymorphic base at position 24 of their
 XX nucleotide sequences. AA269579 to AA277440 represent amplification
 XX primers for the biallelic markers. The biallelic markers of the invention
 XX have a variety of uses: they can be used for high density mapping of the
 XX human genome, and in complex association studies and haplotyping studies
 XX which are useful in determining the genetic basis for disease states.
 XX Compositions and methods of the invention can also be useful for the
 XX identification of the targets for the development of pharmaceutical
 XX agents and diagnostic methods, as well as the characterization of the
 XX differential efficacious responses to and side effects from
 XX pharmaceutical agents acting on a disease as well as other treatment.
 XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 XX 3367, are not actually given a sequence in the Sequence Listing from the
 XX present invention
 XX SQ Sequence 18 BP; 3 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02; Indels 0; Gaps 0;
 Matches 14; Conservative 0; Mismatches 2;
 OY 1078 CCCACTCCAGGCTTCA 1093
 DB 17 CCCATCAAGGCTTCA 2
 RESULT 453
 AAA37653/C
 ID AAA37653 standard; DNA; 18 BP.
 AC AAA37653;
 XX 24-OCT-2000 (first entry)
 XX PCR primer PFX52U for FMR1 gene.
 XX PCR primer; FMR1 gene; fragile XA related allele; GC rich region; FRAXA;
 XX diagnosis; trinucleotide repeat; Fragile XA syndrome; FRAXE-MR; SBA;
 XX spinal and bulbar muscular atrophy; myotonic dystrophy; DRAPUA; SCAL;
 XX Huntington's disease; DM; HD; spinocerebellar ataxia type 1;
 XX fragile XE mental retardation; dentatorubral pallidolysian atrophy; ss.
 XX Homo sapiens.
 XX WO200043531-A2.
 XX 27-JUL-2000.
 XX 24-JAN-2000; 2000WO-US001475.
 XX 25-JAN-1999; 99US-00236097.
 XX (GAMI-) GAWIDA GEN LTD.
 XX (FRIE/) FRIEDMAN M M.
 XX Navot N, Lederkremer M;
 XX WPI; 2000-482916/42.
 XX Characterizing GC rich regions of a nucleic acid comprising modifying GC
 XX PT residues into residues complementary to A or T, and amplifying the
 XX PT modified product, useful for diagnosing trinucleotide repeats.

XX Example 4; Page 45; 47pp; English.
 XX This sequence represents a PCR primer for the FMR1 gene. This sequence
 XX was used to amplify Fragile XA related alleles from the FMR1 gene. The
 XX invention relates to a method for characterising a GC rich region of a
 XX nucleic acid comprising contacting the nucleic acid with an agent that
 XX modifies C or G into residues complementary to A or T, amplifying (at
 XX least part of) the resultant modified nucleic acid, and determining the
 XX size of the amplification product. The methods and kits for carrying out
 XX the methods are useful for characterising GC rich nucleic acids. This is
 XX particularly useful for diagnosing trinucleotide repeats associated with
 XX Fragile XA syndrome (FRAXA), spinal and bulbar muscular atrophy (SBA),
 XX myotonic dystrophy (DM), Huntington's disease (HD), spinocerebellar
 XX ataxia type 1 (SCA1), fragile XE mental retardation (FRAXE-MR) and
 XX dentatorubral pallidolysian atrophy (DRAPUA). Current methods of nucleic
 XX acid sequencing are hampered by the formation of stable secondary
 XX structures in GC rich regions which hamper the sequential incorporation
 XX of nucleotides to a growing duplexed chain
 XX SQ Sequence 18 BP; 2 A; 0 C; 10 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02; Indels 0; Gaps 0;
 Matches 14; Conservative 0; Mismatches 2;
 OY 1134 CACCTCCAGCTCCACC 1149
 DB 17 CACCTCCATCACCACC 2
 RESULT 454
 AAF74788/C
 ID AAF74788 standard; DNA; 18 BP.
 XX AAF74788;
 XX 17-MAY-2001 (first entry)
 XX Midline PCR primer SEQ ID NO:12.
 XX WAR-1; protein screening; endoplasmic reticulum membrane protein;
 XX endoplasmic reticulum membrane transportation; secretory protein;
 XX cell membrane protein; cytosolic; CNS active; antiallergic; cancer;
 XX antirheumatic; nervous system disorder; immune disorder; allergy;
 XX rheumatism; skeletal disorder; PCR primer; ss.
 XX Homo sapiens.
 XX WO200114582-A1.
 XX 01-MAR-2001.
 XX 17-AUG-2000; 2000WO-JP005488.
 XX 20-AUG-1999; 99JP-00234764.
 XX (SUMU) SUMITOMO PHARM CO LTD.
 XX Tohdoh N, Okuyama H, Imamura M, Ishikawa H, Nemoto K;
 XX WPI; 2001-202940/20.
 XX Transformation of a cell with separate vectors expressing the sense and
 XX PT antisense strands of WAR-1 DNA for screening secretory and membrane
 XX PT proteins expressed by the cell.
 XX Example 3; Page 28; 79pp; Japanese.
 XX The present invention describes a screening method for secretory and
 XX CC membrane proteins consisting of transformation of a cell with separate
 XX CC expression vectors for the sense and antisense RNA of DNA encoding an
 XX CC endoplasmic reticulum membrane protein participating in endoplasmic

CC reticulum transport of proteins. Also described are: (1) secretory and
 CC cell membrane proteins identified by the screening method; (2) drug
 CC compositions containing these proteins; (3) host cells transformed by the
 CC separate expression vectors of the method; and (4) the preparation of
 CC secretory and cell membrane proteins by culture of the transformants. The
 CC method can be used for the identification and preparation of proteins for
 CC use in the treatment and prevention of diseases such as cancer, disorders
 CC of the nervous system, immune disorders (including allergies and
 CC rheumatism) and skeletal disorders. The present sequence represents a PCR
 CC primer, which is used in an example from the present invention
 XX
 SQ Sequence 18 BP; 3 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02; Mismatches 0; Gaps 0;

Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

QY 876 CTCGAGCACCACAGTG 891

Db ||||| ||||| |||||
 17 CTCGGGACACAGTG 2

RESULT 455

AAD25547

ID AAD25547 standard; DNA; 18 BP.

XX

AC AAD25547;

XX

DT 26-MAR-2002 (first entry)

XX

DE Human IGFBP-3 interacting protein, P4.33-specific antisense oligo #14.

XX

KW Human; insulin-like growth factor binding protein-3; IGFBP-3; cytostatic;
 KW lung; cervical; breast; colon; cancer; prostate carcinoma; P4.33 protein;
 KW gene therapy; cellular proliferation; apoptosis; receptor; antisense; ss.

XX

OS Homo sapiens.

XX

PN W02001.87238-A2.

XX

PD 22-NOV-2001.

XX

PF 17-MAY-2001; 2001WO-US016437.

XX

PR 17-MAY-2000; 2000US-0204949P.

XX

PA (UYOR-) UNIV OREGON HEALTH SCI.

XX

PI Oh Y, Rosenfeld R, Ingermann AR;

XX

DR WPI; 2002-082938/11.

XX

PT Novel insulin-like growth factor binding protein-3 interacting protein,
 PT termed P4.33 for identifying compounds having anti-cancer activity,
 PT inducing apoptosis and inhibiting cellular proliferation in cancer cells.

XX

PS Claim 47; Page 19; 109pp; English.

XX

CC The present invention relates to an isolated DNA sequence encoding a
 CC insulin-like growth factor binding protein-3 (IGFBP-3) interacting
 CC protein, termed P4.33 protein. IGFBP-3 is used in gene therapy. Antibody
 CC specific for P4.33 is useful in an assay for cancer treatment, prognosis,
 CC or diagnosis in a patient for cancer cells that express P4.33 protein or
 CC peptides, by determining the amount of P4.33 protein or peptides in
 CC blood, serum, urine, lymph, saliva, tumour tissue, placental tissue,
 CC umbilical cord tissue, amniotic fluid, chorionic villi tissue or their
 CC combinations, by enzyme linked immunosorbent assay (ELISA), Western
 CC analysis, immunoprecipitation or immunohistochemistry. Detecting
 CC P4.33 specific sequences in a bodily fluid sample from a patient is also
 CC useful in an assay for cancer treatment, prognosis, or diagnosis in a
 CC patient for cancer cells that express P4.33-specific sequences, by
 CC performing a sequence identity assay such as ELISA immunologic assays,
 CC PCR assays, hybridisation assays and their combinations to detect P4.33-

CC specific sequences. P4.33 is useful for preventing or treating cancer,
 CC including lung, cervical, breast, colon or prostate carcinoma in a
 CC patient; P4.33 functions as a receptor for IGFBP-3 and is involved in the
 CC inhibition of DNA synthesis and cellular proliferation and in the
 CC induction of apoptosis in cancer cells. The present sequence is human
 CC P4.33-specific antisense oligonucleotide

XX

SQ Sequence 18 BP; 4 A; 5 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02; Mismatches 0; Gaps 0;

Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

QY 752 GCACCTGCCATGCAGG 767

Db ||||| ||||| |||||
 2 GCACCTGCCATGCAGG 17

RESULT 456

ABK88473/c

ID ABK88473 standard; DNA; 18 BP.

XX

AC ABK88473;

XX

DT 07-OCT-2002 (first entry)

XX

DE Human HP4 prostaglandin receptor RT-PCR primer #2.

XX

KW Human; ss; PCR; HP4; human placental clone number 4; EP2; primer;
 KW prostaglandin receptor; antiasthmatic; antiinflammatory;
 KW bronchopulmonary inflammation; asthma; inflammation;
 KW antisense gene therapy; reverse transcriptase PCR.

XX

OS Homo sapiens.

XX

PN US6395878-B1.

XX

PD 28-MAY-2002.

XX

PF 12-MAR-1999; 99US-00267423.

XX

PR 05-MAY-1994; 94US-00239431.

XX

PR 05-FEB-1998; 98US-00019393.

XX

PA (ALLR) ALLERGAN SALES INC.

XX

PI Regan JW, Gil DW, Woodward DF;

XX

DR WPI; 2002-572852/61.

XX

PT New full length human prostaglandin human placental clone member 4
 PT polypeptide useful in the development of treatments for bronchopulmonary
 PT inflammation and asthma, and for regulating inflammation.

XX

PS Claim 12; Col 10; 16pp; English.

XX

CC The invention relates to an isolated polypeptide comprising a full length
 CC human prostaglandin (human placental clone number 4) HP4 receptor, where
 CC the amino acid sequence of the receptor is encoded by nucleotide sequence
 CC contained within an open reading frame of plasmid HS/HP4, American Type
 CC Culture Collection (ATCC) accession number 97472. Also included are a
 CC polypeptide comprising a fragment of HP4, where the fragment comprises an
 CC amino acid sequence encoded by 18 consecutive nucleotides of a nucleotide
 CC sequence region flanked by primers of appearing as ABK88470 and ABK88471
 CC and the fragment binds an anti-HP4 antibody, and a composition comprising
 CC the isolated fragment of the human prostaglandin HP4 receptor. The HP4
 CC receptor (which has prostaglandin EP2 receptor pharmacological activity)
 CC is useful for determining the specific processes mediated by HP4 receptor
 CC and in the development of treatments for bronchopulmonary inflammation
 CC and asthma, and in regulating inflammation. HP4 is also useful for
 CC identifying compounds for utilising as therapeutic agents. HP4 is useful
 CC in binding assays in particular for identifying HP4 receptor agonist and
 CC antagonist. The HP4 fragment is useful in in situ hybridisation and for

CC generating antibodies against HP4 receptor epitopes that allows
 CC immunohisto-chemical localisation of the protein in cells, tissues, and
 CC body fluids, and thus identifying a cell expressing the HP4 receptor
 CC subtype. A composition comprising a fragment of HP4 polynucleotide is
 CC useful for decreasing or preventing translation of human HP4
 CC prostaglandin receptor (i.e. antisense gene therapy). The present
 CC sequence is a reverse transcriptase (RT)-PCR primer used to amplify a
 CC region of the HP4 prostaglandin receptor mRNA corresponding to the second
 CC extracellular loop and seventh transmembrane domain
 SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02; Indels 0; Gaps 0;
 Matches 14; Conservative 0; Mismatches 2;
 Qy 912 CTTGGGCTTTGGCTT 927
 Db 17 CTTGGGCTTTGGCAT 2

RESULT 457
 ABK15756/C
 ID ABK15756 standard; DNA; 18 BP.
 XX AC ABK15756;
 XX DT 08-MAY-2002 (first entry)
 XX DE Prostaglandin receptor EP2 antisense PCR primer DNA sequence.
 XX KW Human; cyclooxygenase-2; COX-2; PCR; primer; sepsis; pancreatitis; burn;
 KW trauma; blood loss; penetrating injury; septic shock; pneumonia;
 KW septicemia; bacteremia; urinary tract infection; wound infection;
 KW drug reaction; systemic inflammatory response syndrome; PGE₂;
 KW prostaglandin E₂; receptor; EP2; ss.
 XX OS Homo sapiens.
 XX US2002006915-A1.
 XX PD 17-JAN-2002.
 XX PF 14-FEB-2001; 2001US-00782936.
 XX PR 15-FEB-2000; 2000US-0182524P.
 XX PA (STRO/) MACK STRONG V E.
 XX PA (STAP/) STAPLETON P P.
 XX PA (DALY/) DALY J M.
 XX PI Mack Strong VE, Stapleton PP, Daly JM;
 XX WPI; 2002-179019/23.
 XX Treating a patient at risk for systemic inflammatory response syndrome
 e.g. trauma involves administering cyclooxygenase-2 inhibitor or a drug.
 XX Example 5; Page 10; 39pp; English.
 XX The present invention relates to a new method of treating a patient at
 CC risk for systemic inflammatory response syndrome. The method involves
 CC administering a selective cyclooxygenase-2 inhibitor or a drug which
 CC stimulates at least one prostaglandin E₂ (PGE₂) receptor or a drug
 CC which interferes with binding of PGE₂ to at least one of PGE₂
 CC receptors. The invention can be used for treating a patient at risk for
 CC systemic inflammatory response syndrome e.g. sepsis, pancreatitis, burns,
 CC trauma, life threatening blood loss from penetrating injury, or a patient
 CC who has undergone surgery, septic shock, infections such as pneumonia,
 CC septicemia, bacteraemia, urinary tract infection, wound infection or
 CC drug reaction and can also be used for beneficial immune modulation. The
 CC inhibitor or the drugs selectively modulate the immune response after
 CC trauma, reduce the incidence of infectious complications and improve

CC survival after traumatic injury. The present nucleic acid sequence
 CC represents the human prostaglandin receptor EP2 antisense PCR primer that
 CC was used in the invention with the EP2 sense PCR primer (ABK15755) for
 CC peripheral blood mononuclear cell RNA preparation
 XX SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02; Indels 0; Gaps 0;
 Matches 14; Conservative 0; Mismatches 2;
 Qy 912 CTTGGGCTTTGGCTT 927
 Db 17 CTTGGGCTTTGGCAT 2

RESULT 458
 ABA05926
 ID ABA05926 standard; DNA; 18 BP.
 XX AC ABA05926;
 XX DT 05-MAR-2002 (first entry)
 XX DE Escherichia coli ygbp PCR primer SEQ ID NO 7.
 XX KW Escherichia coli; ygbp; CDP-ME synthase; protein coordinate data;
 KW 4-diphosphocytidyl-2-C-methylerythritol synthase; terpenoid; infection;
 KW non-mevalonate isoprenoid; biosynthesis pathway; antibacterial; tetanus;
 KW antidiarrheic; antinflammatory; tuberculostatic; Streptococcus; anthrax;
 KW toxic shock syndrome; meningitis; gonorrhea; gastroenteritis; PCR primer;
 KW ss.
 XX OS Escherichia coli.
 XX EN WO200183769-A2.
 XX PD 08-NOV-2001.
 XX PF 03-MAY-2001; 2001WO-US014371.
 XX PR 03-MAY-2000; 2000US-0201589P.
 XX PR 12-DEC-2000; 2000US-0255088P.
 XX PA (SALK) SALK INST BIOLOGICAL STUDIES.
 XX PI Noel JP, Bowman ME, Richard S;
 XX WPI; 2002-089742/12.
 XX Composition, useful for treating bacterial infections and for identifying
 modulator compounds, comprise crystalline 4-diphosphocytidyl-2-C-
 methylerythritol synthase.
 XX Example 2; Page 36; 176pp; English.
 XX The invention relates to a composition (I) comprising CDP-ME, 4-
 CC diphosphocytidyl-2-C-methylerythritol synthase in crystalline form. The
 CC invention also discloses screening for compounds (II) that inhibit the
 CC non-mevalonate isoprenoid biosynthesis pathway. (II) has antibacterial,
 CC antidiarrheic, antinflammatory and tuberculostatic activity. (II) is
 CC useful for inhibiting in vitro or in vivo, the activity of one or more
 CC enzymes in the non-mevalonate isoprenoid biosynthesis pathway, in a cell
 CC or cell-free environment, and thus modulating the growth of a cell e.g.
 CC bacterial cell. (II) is also useful for inhibiting bacterial terpenoid
 CC synthesis and treating a subject suffering from a bacterial infection
 CC e.g. infection by Streptococcus or Escherichia coli. (II) is also useful
 CC for treating disorders caused by bacterial infections, including
 CC diarrhoea, pneumonia, dysentery, anthrax, rheumatic fever, toxic shock
 CC syndrome, mastitis, meningitis, gonorrhea, typhoid fever,
 CC gastroenteritis, brucellosis, cholera, bubonic plague, tetanus,
 CC tuberculosis and Lyme disease. The present sequence is that of a PCR
 CC primer for expression of the E. coli ygbp gene encoding CDP-ME synthase

XX SQ Sequence 18 BP; 5 A; 7 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 735 GAACAGACACACCGTG 750
 DB 3 GAACAGACACACCGTG 18

RESULT 459
 ABS57306/c
 ID ABS57306 standard; DNA; 18 BP.
 XX AC
 AC ABS57306;
 XX
 DT 31-JAN-2003 (first entry)
 XX
 DE PCR primer #2 for DNA encoding human placental clone number 4 (HP4).
 XX
 KW Human; EP prostaglandin receptor; human placental clone number 4; HP4;
 KW adenylylate cyclase; chronic asthma; immunosuppression; antiasthmatic; PCR;
 KW primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2002128445-A1.
 XX
 PD 12-SEP-2002.
 XX
 PF 28-MAR-2002; 2002US-00108714.
 XX
 PR 05-MAY-1994; 94US-00239431.
 PR 05-FEB-1998; 98US-00019393.
 PR 12-MAR-1999; 99US-00267423.
 XX
 PA (UYAR-) UNIV ARIZONA STATE.
 XX
 PI Regan JW, Gil DW, Woodward DF;
 XX
 DR WPI; 2003-066913/06.
 XX

Novel isolated human prostaglandin HP4 receptor polypeptide encoded by
 plasmid KS/HP4, useful to stimulate adenylylate cyclase activity in
 response to prostaglandins or to raise antibodies against HP4 receptor
 epitopes.

Example 6; Page 5; 12pp; English.

XX The present invention relates to a gene encoding a novel human EP
 CC prostaglandin receptor, referred to as human placental clone number 4
 CC (HP4). Also described is a vector, KS/HP4 (pBluescript HP4 clone), used
 CC for the expression of HP4 in eukaryotic cells. The HP4 receptor, when
 CC expressed in eukaryotic cells, is capable of binding prostaglandins and
 CC their analogues, and stimulating adenylylate cyclase activity in response
 CC to prostaglandins. The HP4 receptor is useful for studying the
 CC pharmacology, cellular distribution, and expression of the HP4 receptor.
 CC It is also useful as an antigen to raise antibodies against HP4 receptor
 CC epitopes, in binding assays for identifying HP4 receptor agonists and
 CC antagonists, and for screening compounds able to bind to the
 CC prostaglandin HP4 receptor. A composition comprising an antisense agent
 CC able to inhibit or prevent translation of the HP4 receptor in vivo is
 CC useful for attenuating the effects of endogenous HP4 receptor agonists in
 CC patients having conditions such as chronic asthma or immunosuppression,
 CC and for treating the above conditions. The present sequence represents a
 CC PCR primer for DNA encoding HP4

XX SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 912 CTTTGGTCCTTGGCTT 927
 DB 17 CTTGGGTCCTTGGCAT 2

RESULT 460
 ACF62995
 ID ACF62995 standard; DNA; 18 BP.
 XX AC
 AC ACF62995;
 XX
 DT 09-OCT-2003 (first entry)
 XX
 DE Human p16 PCR primer SEQ ID NO:244.
 XX
 KW Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; p16; p53;
 KW progesterone receptor; pcna; CEA; cdc2; c-erbB2; methylation; CpG;
 KW characterisation; classification; diagnosis; differentiation;
 KW colon cell proliferative disorder; PCR primer; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WC2003014388-A2.
 XX
 PD 20-FEB-2003.
 XX
 PF 09-AUG-2002; 2002WO-EP008939.
 XX
 PR 09-AUG-2001; 2001DE-01039283.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Distler J, Model F, Taubert H;
 XX
 DR WPI; 2003-256600/25.
 XX

Determining methylation status of CpG dinucleotides using modified
 genomic sequences, oligonucleotides and/or PNA-oligonucleotides, useful in the
 characterization, grading, staging and/or diagnosis of colon cancer.

Claim 26; Page 165; 219pp; English.

XX The present invention describes a method for determining the methylation
 CC status of CpG dinucleotides within the genes for oestrogen receptor, p21,
 CC p27, p16, progesterone receptor, myoglobin, pcna, cdc2, c-erbB2, p53
 CC and/or CEA, which comprises contacting the target nucleic acid with a
 CC reagent that distinguishes between methylated and non-methylated CpG
 CC dinucleotides, and determining from the methylation status of the CpG
 CC positions the presence of a colon cancer. A set of oligomers or peptide
 CC nucleic acid (PNA)-oligonucleotides can be used as probes for determining the
 CC cytosine methylation state and/or single nucleotide polymorphisms (SNP)
 CC of a corresponding genomic DNA by analysis of a chemically pretreated
 CC genomic DNA. The pretreated genomic DNA is useful for the determination
 CC of the methylation status of a corresponding genomic DNA and/or detection
 CC of SNPs. The methods and pretreated genomic DNA are also useful for the
 CC characterisation, classification, diagnosis and differentiation of colon
 CC cell proliferative disorders. ACF62752 to ACF63278 represent sequences
 CC used in the exemplification of the present invention

XX SQ Sequence 18 BP; 3 A; 11 C; 1 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. No. 5e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1242 CGCTCCGACCCCATC 1257
 DB 3 CCCCTCCGACCCCATC 18

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RESULT 461
ACF62993/c
ID ACF62993 standard; DNA; 18 BP.
XX
XX ACF62993;
AC
XX 09-OCT-2003 (first entry)
DT
XX
XX Human p16 PCR primer SEQ ID NO:242.
DE
XX
XX Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; p16; p53;
KW progesterone receptor; pona; CEA; cdc2; c-erbB2; methylation; CpG;
KW Characterisation; classification; diagnosis; differentiation;
KW colon cell proliferative disorder; PCR primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX WO2003014388-A2.
FN
XX
XX 20-FEB-2003.
PD
XX
XX 09-AUG-2002; 2002WO-EP008939.
PF
XX
XX 09-AUG-2001; 2001DE-01039283.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Distler J, Model F, Taubert H;
PI
XX
XX WPI; 2003-256600/25.
DR
XX
XX Determining methylation status of CpG dinucleotides using modified
PT genomic sequences, oligonucleotides and/or PNA-oligomers, useful in the
PT characterization, grading, staging and/or diagnosis of colon cancer.
PT
XX
XX Claim 26; Page 164; 219pp; English.
PS
XX
XX The present invention describes a method for determining the methylation
CC status of CpG dinucleotides within the genes for oestrogen receptor, p21,
CC p27, p16, progesterone receptor, myoglobin, pona, cdc2, c-erbB2, p53
CC and/or CEA, which comprises contacting the target nucleic acid with a
CC reagent that distinguishes between methylated and non-methylated CpG
CC dinucleotides, and determining from the methylation status of the CpG
CC positions the presence of a colon cancer. A set of oligomers or peptide
CC nucleic acid (PNA)-oligomers can be used as probes for determining the
CC cytosine methylation state and/or single nucleotide polymorphisms (SNP)
CC of a corresponding genomic DNA by analysis of a chemically pretreated
CC genomic DNA. The pretreated genomic DNA is useful for the determination
CC of the methylation status of a corresponding genomic DNA and/or detection
CC of SNPs. The methods and pretreated genomic DNA are also useful for the
CC characterisation, classification, diagnosis and differentiation of colon
CC cell proliferative disorders. ACF62752 to ACF63278 represent sequences
CC used in the exemplification of the present invention.
XX
XX Sequence 18 BP; 3 A; 1 C; 11 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1242 CGCTCCGACCCCATC 1257
Db 16 CCCCTCGACCCCATC 1
RESULT 462
ABX94542/c
ID ABX94542 standard; DNA; 18 BP.
XX
XX ABX94542;
AC
XX 13-JUN-2003 (first entry)
DT
XX
XX Sequence 18 BP; 1 A; 7 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1011 ACCTGAAAAAGAGGGG 1026
Db 18 ACCGAAAAAGAGGAG 3
RESULT 463
AAD50970
ID AAD50970 standard; DNA; 18 BP.
XX
XX AAD50970;
AC
XX 02-APR-2003 (first entry)
DT
XX
XX DM21 primer, to detect the presence of pTUBE011-2 in Schizochytrium sp.
DE Acetolactate synthase; ALS; alpha-tubulin; polyketide synthase; PKS;
XX fatty acid desaturase; primer; ss.
XX
XX Schizochytrium sp.
OS
XX WO200283869-A2.
XX
XX 24-OCT-2002.
PD

```

23S/16S rRNA detecting probe SEQ ID 11.

Detection; probe; contaminant; drinking water; Legionella; coliform; faecal streptococci; soil; sputum; biopsy; urine; food; pharmaceutical; cosmetic; fluorescent in situ hybridisation; FISH; ss.

Streptococcus sp.

WO2002102824-A2.

27-DEC-2002.

19-JUN-2002; 2002WO-EP006809.

19-JUN-2001; 2001DE-01029411.

11-DEC-2001; 2001DE-01060666.

(VERM-) VERMICON AG.

Beimfohr C, Snaird J;

WPI; 2003-167479/16.

New oligonucleotides, useful for detecting bacteria that may contaminate drinking water, provide quick results for many species in parallel.

Claim 8; Page 12; 53pp; German.

This invention describes novel oligonucleotide probes used to detect contaminant bacteria that may be present in drinking water. The probes can detect bacteria (especially Legionella, faecal streptococci and coliforms) that may contaminate drinking water in environmental samples (water or soil), clinical samples (sputum, biopsies, urine etc.), in bathing and drinking water and in foods, pharmaceuticals and cosmetics, by in situ hybridisation. The probes combine the advantages of fluorescent in situ hybridisation with those of culture methods. Only a relatively short culture step is required; analysis takes 24-48 hours (contrast many days for conventional methods) and all relevant bacteria can be tested simultaneously. The oligonucleotides can differentiate between species of the same genus and are easy to use, allowing simple analysis of a large number of samples. ABX94532-ABX94578 represent the oligonucleotide probes described in the invention

Sequence 18 BP; 1 A; 7 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1011 ACCTGAAAAAGAGGGG 1026
||| |||||
Db 18 ACCGAAAAAGAGGAG 3

RESULT 463
AAD50970
ID AAD50970 standard; DNA; 18 BP.
XX
XX AAD50970;
AC
XX 02-APR-2003 (first entry)
DT
XX
XX DM21 primer, to detect the presence of pTUBE011-2 in Schizochytrium sp.
DE Acetolactate synthase; ALS; alpha-tubulin; polyketide synthase; PKS;
XX fatty acid desaturase; primer; ss.
XX
XX Schizochytrium sp.
OS
XX WO200283869-A2.
XX
XX 24-OCT-2002.
PD

XX 16-APR-2002; 2002WO-US012040.
XX PF
XX PR
XX PR 16-APR-2001; 2001US-0284116P.
XX PA (OMEG-) OMEGATECH INC.
XX PI
XX PI Roessler PG, Matthews TD, Ramseyer TM, Metz JG;
XX WPI; 2003-075541/07.
XX DR
XX XX
XX PT New nucleic acid molecule, useful for transforming Thraustochytriales
XX PT microorganisms or the foreign nucleic acids in a Thraustochytriales.
XX PS
XX PS Example 4; Page 106; 112pp; English.
XX XX
XX CC The present invention relates to novel nucleic acids and proteins for
XX CC acetylactate synthase, acetylactate synthase (ALS) regulatory regions,
XX CC alpha-tubulin promoter, polyketide synthase (PKS) promoter and fatty acid
XX CC desaturase promoter from Thraustochytriales microorganisms. The nucleic
XX CC acids of the invention are useful for transforming Thraustochytriales
XX CC microorganisms or the foreign nucleic acids in a Thraustochytriales. The
XX CC present sequence is a primer which is used to detect the presence of
XX CC pTUBZEB1-2 sequences in Schizochytrium species. This sequence is used in
XX CC the exemplification of the invention
XX SQ
XX Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 5e+02; Mismatches 0; Gaps 0;
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;
QY 822 GGAGTGCACGAGTTG 837
DB 2 GAAGTGCACGAGTTG 17
RESULT 464
ADB54573/C
ID ADB54573 standard; DNA; 18 BP.
XX AC ADB54573;
XX DT
XX DT 04-DEC-2003 (first entry)
XX DE
XX DE Hybridisation oligonucleotide 111 used to analyse genomic DNA region.
XX KW colon cell proliferative disorder; non methylated CpG dinucleotide;
XX KW cytosstatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;
XX KW probe.
XX OS
XX OS Unidentified.
XX OS WO2003072821-A2.
XX PN
XX PD 04-SEP-2003.
XX PF 27-FEB-2003; 2003WO-EP002035.
XX PR 27-FEB-2002; 2002EP-00004551.
XX XX (EPIG-) EPIGENOMICS AG.
XX FA Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;
XX PI Rujan T, Schmitt A;
XX PI WPI; 2003-731620/69.
XX DR
XX XX
XX PT Detecting and differentiating between colon cell proliferative disorders
XX PT associated with a gene or its regulatory regions comprises contacting a
XX PT target nucleic acid in a biological sample obtained from the subject with
XX PT a reagent.

PS Claim 36; Page 32; 74pp; English.
XX CC
XX CC The invention relates to a novel method for detecting and differentiating
XX CC between colon cell proliferative disorders associated with at least one
XX CC gene or its regulatory regions. The method comprises contacting a target
XX CC nucleic acid in a biological sample obtained from the subject with at
XX CC least one reagent or a series of reagents, where the reagent or series of
XX CC reagents, distinguishes between methylated and non methylated CpG
XX CC dinucleotides within the target nucleic acid. The molecules of the
XX CC invention demonstrate cytosstatic activity whilst the method may useful
XX CC for detecting and differentiating between colon cell proliferative
XX CC disorders, including cancers such as colon adenoma and colon carcinoma.
XX CC The PNA (peptide nucleic acid)-oligomers are useful as probes for
XX CC determining cytosine methylation state or single nucleotide
XX CC polymorphisms. The current sequence is that of the hybridisation
XX CC oligonucleotide of the invention which was used to analyse the genomic
XX CC DNA region.
XX SQ Sequence 18 BP; 3 A; 1 C; 11 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 5e+02; Mismatches 0; Gaps 0;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1242 CGCCTCCGACCCATC 1257
DB 16 CCCCTCCGACCCATC 1
RESULT 465
ADC70166/C
ID ADC70166 standard; DNA; 18 BP.
XX AC ADC70166;
XX DT
XX DT 18-DEC-2003 (first entry)
XX DE
XX DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 656).
XX KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
XX KW adenocarcinoma; squamous cell carcinoma; cytosstatic; probe; PNA-oligomer;
XX KW cytosine methylation state.
XX OS
XX OS Unidentified.
XX OS WO2003052135-A2.
XX PN
XX PD 26-JUN-2003.
XX PF 10-DEC-2002; 2002WO-EP014026.
XX PR 14-DEC-2001; 2001DE-01061625.
XX XX (EPIG-) EPIGENOMICS AG.
XX XX Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
XX PI Nimmrich I;
XX PI WPI; 2003-533029/50.
XX DR
XX XX
XX PT Detecting and differentiating cytosine methylation state of genomic DNA,
XX PT useful for diagnosing, treating prognosticating and/or monitoring lung
XX PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
XX PT carcinoma.
XX PS Claim 15; SEQ ID NO 656; 58pp; English.
XX XX
XX CC This invention relates to a novel method for detecting and
XX CC differentiating between lung cell proliferative disorders associated with
XX CC at least one gene and/or their regulatory regions. Specifically, it
XX CC refers to a method comprising contacting a target nucleic acid in a
XX CC biological sample with at least one reagent, wherein the reagent is able
XX CC to distinguish between methylated and non-methylated CpG dinucleotides

CC present in the target DNA. As such, it is possible to further
 CC differentiate and diagnose medical conditions including adenocarcinoma
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.
 CC The present invention describes cytosstatic oligomers and PNA-oligomers
 CC that are useful as probes for determining the cytosine methylation state
 CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
 CC oligonucleotide sequence is a primer oligomer used for the analysis of
 CC CpG positions within genomic DNA, used in an exemplification of the
 CC invention.

XX
 SQ Sequence 18 BP; 3 A; 1 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. NO. 5e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1253 CCATCCCCCAACCCCT 1268
 Db 17 CCATCCCCGACCTCT 2

RESULT 466
 ADC70336
 ID ADC70336 standard; DNA; 18 BP.
 XX
 AC ADC70336;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 826).
 XX
 KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
 KW adenocarcinoma; squamous cell carcinoma; cytosstatic; probe; PNA-oligomer;
 KW cytosine methylation state.
 XX
 OS Unidentified.
 XX
 FN WO2003052135-A2.
 XX
 PD 26-JUN-2003.
 XX
 PF 10-DEC-2002; 2002WO-EP014026.
 XX
 PR 14-DEC-2001; 2001DE-01061625.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
 PI Nimmrich I;
 XX
 DR WPI; 2003-533029/50.
 XX
 PT Detecting and differentiating cytosine methylation state of genomic DNA,
 PT useful for diagnosing, treating prognosticating and/or monitoring lung
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
 PT carcinoma.
 XX
 PS Claim 15; SEQ ID NO 826; 58pp; English.
 XX
 CC This invention relates to a novel method for detecting and
 CC differentiating between lung cell proliferative disorders associated with
 CC at least one gene and/or their regulatory regions. Specifically, it
 CC refers to a method comprising contacting a target nucleic acid in a
 CC biological sample with at least one reagent, wherein the reagent is able
 CC to distinguish between methylated and non-methylated CpG dinucleotides
 CC present in the target DNA. As such, it is possible to further
 CC differentiate and diagnose medical conditions including adenocarcinoma
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.
 CC The present invention describes cytosstatic oligomers and PNA-oligomers
 CC that are useful as probes for determining the cytosine methylation state
 CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
 CC oligonucleotide sequence is a primer oligomer used for the analysis of
 CC CpG positions within genomic DNA, used in an exemplification of the

CC invention.
 XX
 SQ Sequence 18 BP; 4 A; 1 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;
 Best Local Similarity 87.5%; Pred. NO. 5e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 765 AGTTTCTTCTTAAGA 780
 Db 3 AGTTTCGTTTAAAGA 18

RESULT 467
 AAD60507
 ID AAD60507 standard; DNA; 18 BP.
 XX
 AC AAD60507;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Human c-IAP-2 antisense oligonucleotide #ISIS #23480.
 XX
 KW Human; antisense; cellular inhibitor of apoptosis-2; c-IAP-2; cancer;
 KW hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;
 KW API-1; hIAP-1; MHC; gene therapy; phosphorothioate; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone; All cytidine residues
 FT are 5-methylcytidines"
 FT modified_base 1..4
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 15..18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 XX
 PN US2003083300-A1.
 XX
 PD 01-MAY-2003.
 XX
 PF 16-JUL-2002; 2002US-00197290.
 XX
 PR 23-SEP-1999; 99WO-US022083.
 PR 04-OCT-2001; 2001US-00857299.
 XX
 PA (BENN/) BENNETT C F.
 PA (ACKE/) ACKERMANN E J.
 PA (COWS/) COWSERT I M.
 XX
 PI Bennett CF, Ackermann EJ, Cowsert LM;
 XX
 DR WPI; 2003-755119/71.
 XX
 PT New antisense compound, preferably an oligonucleotide, for inhibiting
 PT expression of human Cellular Inhibitor of Apoptosis-2 in human cells or
 PT tissues, and for treating diseases, such as cancer or an autoimmune
 PT disease.
 XX
 PS Example 16; Page 22; 34pp; English.
 CC The invention relates to antisense compounds targetted to a nucleic acid
 CC encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2,
 CC apoptosis inhibitor 2, API-1, hIAP-1 and MHC) to inhibit its expression.
 CC Antisense compounds of the invention are used to induce apoptosis in

human cells or tissues to treat diseases or conditions associated with insufficient apoptosis. They are used to treat diseases or conditions associated with C-IAP-2 such as hyperproliferative conditions especially cancer or autoimmune diseases. The invention is also useful in antisense gene therapy. The present sequence is an antisense oligonucleotide targeted to human C-IAP-2 DNA

receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published_pat_sequences](http://wipo.int/pub/published_pat_sequences)

CC an IkappaB regulator protein for the treatment of inflammatory bowel
 CC disease, or a nitroreductase protein which can activate nitro drugs in
 CC enzyme/prodrug therapy to treat cancer or other pathological conditions.
 CC The fusion proteins can also be used in diagnostic methods such as in
 CC vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
 XX

SQ Sequence 24 BP; 4 A; 14 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.8; DB 1; Length 24;
 Best Local Similarity 70.8%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 295 GTGCTCTGGAGCTGTGTTGGGA 318
 ||| ||||| ||||| |||||
 Db 24 GTGGAGCTGGAGCTGCGGTGGAA 1

RESULT 470
 ABK95975/C
 ID ABK95975 standard; DNA; 15 BP.
 XX
 AC ABK95975;
 XX
 DT 24-SEP-2002 (first entry)
 XX
 DE Human LIPE gene polymorphism detection ASO primer #8.
 XX
 DE Human; lipase; hormone sensitive; LIPE; isogene; obesity; primer; ss;
 KW male sterility; polymorphism; allele-specific oligonucleotide; ASO.
 XX
 OS Homo sapiens.
 XX
 PN WO200240502-A2.
 XX
 PD 23-MAY-2002.
 XX
 PF 16-NOV-2001; 2001WO-US043518.
 XX
 PR 16-NOV-2000; 2000US-0249302P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Anastasio AE, Bentivegna SC, Chew A, Koshy B, Rounds E;
 XX WPI; 2002-519369/55.

PT Novel genetic variants of Lipase, Hormone-Sensitive isogenes, useful for
 PT improving efficiency and reliability in drug development for treating
 PT diseases associated with LIPE activity, e.g. obesity and male sterility.
 XX
 PS Claim 15; Page 15; 142pp; English.
 CC
 CC The present invention relates to a new polynucleotide comprising a
 CC nucleotide sequence which comprises lipase, hormone sensitive (LIPE)
 CC isogenes. The invention is useful in screening for drugs targeting LIPE
 CC isogenes that are useful for treating obesity and male sterility. The
 CC methods of the invention are useful for improving the efficiency and
 CC reliability of several steps in the discovery and development of drugs
 CC for treating diseases associated with LIPE activity. The polynucleotide
 CC is useful in studying the expression and function of LIPE, and in
 CC expressing LIPE protein for use in screening for candidate drugs to treat
 CC diseases related to LIPE activity. It is also useful in studying the
 CC effect of the variation on the biological activity of LIPE as well as on
 CC the binding affinity of candidate drugs targeting LIPE for the treatment
 CC of obesity and male sterility. The invention is useful for studying the
 CC expression of LIPE isogenes in vivo, for in vivo screening and testing of
 CC drugs targeted against LIPE protein, and for testing the efficacy of
 CC therapeutic agents and compounds for treating obesity and male sterility
 CC in a biological system. The present nucleic acid sequence represents one
 CC of a collection (ABK95968-ABK96025) of allele-specific oligonucleotide
 CC (ASO) primers that were used in the invention to detect polymorphisms in
 CC the human LIPE gene

SQ Sequence 15 BP; 2 A; 2 C; 7 G; 3 T; 0 U; 1 Other;

Query Match 0.6%; Score 12.6; DB 1; Length 15;
 Best Local Similarity 92.3%; Pred. No. 3.2e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1133 TCACCTCCAGCTC 1145
 :||| ||||| |||||
 Db 14 YCACCTCCAGCTC 2

RESULT 471
 AAD43373/C
 ID AAD43373 standard; DNA; 15 BP.
 XX
 AC AAD43373;
 XX
 DT 14-NOV-2002 (first entry)
 XX
 DE Human CYP3A5 gene polymorphism detecting ASO primer #1.

XX Human; cytochrome P450; subfamily IIIA; polypeptide 5 isogene; CYP3A5;
 KW drug screening; polymorphism; haplotype; drug metabolising disorder;
 KW gene therapy; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200246209-A2.
 XX
 PD 13-JUN-2002.
 XX
 PF 07-DEC-2001; 2001WO-US047218.
 XX
 PR 08-DEC-2000; 2000US-0254367P.
 PR 03-MAY-2001; 2001US-0288470P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Anastasio AE, Han J, Klem SE, Rounds E;
 XX WPI; 2002-636448/68.

PT Novel isolated polynucleotide which is a polymorphic variant of
 PT cytochrome P450, subfamily IIIA, polypeptide 5 (CYP3A5) gene useful for
 PT expressing CYP3A5 protein isoform used in drug screening techniques.
 XX
 PS Claim 15; Page 15; 127pp; English.
 CC
 CC The invention relates to isolated polynucleotide having cytochrome P450,
 CC subfamily IIIA, polypeptide 5 isogene (CYP3A5). The invention is useful
 CC for screening drugs. The invention is useful for studying expression and
 CC function of CYP3A5 and expressing CYP3A5 protein for use in screening for
 CC candidate drugs to treat diseases related to CYP3A5 activity. The
 CC polymorphism and haplotype data is useful for validating whether CYP3A5
 CC is a suitable target for drugs to treat drug metabolising disorders,
 CC screening for such drugs and reducing bias in clinical trials of such
 CC drugs. The invention is also useful for therapeutic purposes. The
 CC invention is useful in studying the effect of variation on the biological
 CC activity of CYP3A5 as well as on the binding affinity of candidate drugs
 CC to CYP3A5, or for studying the enzymatic properties of such CYP3A5
 CC variants using these candidate drugs as substrate. The invention is
 CC useful in gene therapy. The present sequence is human CYP3A5 gene
 CC polymorphism detecting ASO (allele-specific oligonucleotide) primer

SQ Sequence 15 BP; 0 A; 1 C; 8 G; 5 T; 0 U; 1 Other;

Query Match 0.6%; Score 12.6; DB 1; Length 15;
 Best Local Similarity 92.3%; Pred. No. 3.2e+02;
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1289 CCGCAGCCGACA 1301
 :||| ||||| |||||
 Db 15 CYCACAAGCCACA 3


```

RESULT 472
AAV22315
ID AAV22315 standard; DNA; 14 BP.
XX AC
XX AAV22315;
XX AC
XX 29-JUN-1998 (first entry)
XX DE
XX 14 base loop sequence containing a 8 base ZIP sequence.
XX 3' untranslated region; UTR; inhibition; gene expression; ICAM-7;
XX interferon-gamma; IFN-gamma; major histocompatibility complex; MHC;
XX antigen expression; gene promoter; utron; B7-1; B7-2; Fc gamma R;
XX HIV gene expression; transplant rejection; treatment; cyclosporin; FK506;
XX autoimmune disease; inflammatory disease; ss.
XX Unidentified.
XX WO9744450-A1.
XX 27-NOV-1997.
XX 21-MAY-1997; 97WO-US009459.
XX 21-MAY-1996; 96US-00646789.
XX (UYUA ) UNIV YALE.
XX Peyman JA;
XX WPI; 1998-018505/02.
XX Utrons, RNA molecules containing promoter regulatory motifs - useful to
XX suppress express expression from promoter of interest, specifically T9U
XX nucleic acid suppression of MHC Class I and II gene expression.
XX Disclosure; Page 101; 200pp; English.
XX The present sequence is found in stem-loop structure 1 of a synthetic
XX interleukin-2 repressor utron. It contains an 8 base ZIP sequence. Utrons
XX are from, or are homologous to, the 3' untranslated region (UTR), of an
XX mRNA that stimulates or inhibits a cellular response by sequence specific
XX interactions. Utrons are able to suppress constitutive and interferon-
XX gamma (IFN-gamma) induced major histocompatibility complex (MHC) class I
XX and class II antigen expression and expression of other antigens, the
XX gene promoters of which contain related sequence motifs that are
XX stimulated by the same factors which stimulate MHC class I and class II
XX antigen expression. The synthetic utron is designed to suppress
XX activation of T lymphocytes caused by IL-2 and to result in generalised
XX immunosuppression if expressed specifically in T lymphocytes. The
XX synthetic utron stimulates the effects of the drugs cyclosporin A and
XX FK506. Such utrons can be used to regulate gene expression in a subject,
XX e.g. a human or a cell in vitro, specifically inhibiting MHC Class I or
XX II, ICAM-7, B7-1, B7-2, Fc gamma R, IL-2 or HIV gene expression. They can
XX be used to inhibit transplant rejection, or treat an autoimmune or
XX inflammatory disease or disorder
XX
XX Sequence 14 BP; 2 A; 8 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 14;
Best Local Similarity 92.9%; Pred. No. 2.9e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1092 CACCCCACTCTGG 1105
Db 1 CATCCCCACCTGG 14

RESULT 473
AAV57019
ID AAV57019 standard; DNA; 14 BP.
XX AC
XX AAV57019;
XX AC
XX 25-MAR-2003 (revised)
XX 21-DEC-1998 (first entry)
XX DE
XX Human Notch3 gene intron 9/exon 10 boundary sequence.
XX Human; Notch3; transmembrane receptor; lateral inhibition; regulation;
XX developmental cascade; neurogenic gene; mutant; neurological disorder;
XX cerebral autosomal dominant arteriopathy; subcortical infarct; CADASIL;
XX leukoencephalopathy; therapy; intron; exon; ss.
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Intron 1..8
XX /*tag= a
XX /number= 9
XX exon 9..14
XX /*tag= b
XX /number= 10
XX
XX FR2751986-A1.
XX 06-FEB-1998.
XX 16-APR-1997; 97FR-00004680.
XX 01-AUG-1996; 96FR-00009733.
XX (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX Tournier LE, Joutel A, Bousser MG, Bach JF;
XX WPI; 1998-133138/13.
XX Human Notch3 nucleic acids - and methods for identifying pre-disposition
XX to cerebral autosomal dominant arteriopathy with sub-cortical infarcts
XX and leukoencephalopathy.
XX
XX Example 3; Page 20; 45pp; French.
XX This sequence represents the boundary between intron 9 and exon 10 of the
XX human Notch3 gene. Notch3 is a transmembrane receptor protein involved in
XX lateral inhibition and regulating developmental cascades of neurogenic
XX genes. Mutated Notch3 proteins are thought to be involved in neurological
XX disorders, especially of the cerebral autosomal dominant arteriopathy
XX with subcortical infarcts and leukoencephalopathy (CADASIL) type.
XX Blocking expression of a mutated Notch3 gene or by substitution therapy
XX with non-mutated Notch3 gene or protein can be used to treat CADASIL or
XX related disorders. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX Sequence 14 BP; 3 A; 7 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 14;
Best Local Similarity 92.9%; Pred. No. 2.9e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1080 CACTCCAGGCTTCA 1093
Db 1 CACCCCAAGGCTTCA 14

RESULT 474
ABK99293
ID ABK99293 standard; RNA; 14 BP.
XX AC
XX ABK99293;
XX AC
XX 21-OCT-2002 (first entry)
XX DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #23.

```

```

XX KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX OS Synthetic.
XX FN US2002064771-A1.
XX PD 30-MAY-2002.
XX PF 06-APR-2001; 2001US-00828034.
XX PR 07-APR-2000; 2000US-0195852P.
XX PA (ZHONG/) ZHONG W.
XX PA (HONG/) HONG Z.
XX PA (FERR/) FERRARI E.
XX PI Zhong W, Hong Z, Ferrari E;
XX DR WPI; 2002-582330/62.
XX PT Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
XX PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
XX PT and template and primer which do not form a stable duplex in the absence
XX PT of HCV NS5B.
XX PS Example; Page 6; 17pp; English.
XX CC The invention relates to a replicase complex comprising a hepatitis C
XX CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
XX CC complementary nucleic acid primer which is annealed to the 3' terminus of
XX CC the template, where the template is at least three nucleotides and the
XX CC primer is two or three nucleotides, and the template and primer do not
XX CC form a stable duplex in solution in the absence of the HCV NS5B protein.
XX CC The complex is useful for detecting HCV replicase activity and permits
XX CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
XX CC and evaluate antiviral inhibitors and to improve the specificity and
XX CC efficacy of the inhibitors. The complex is also useful in the development
XX CC of a reliable system for determining kinetic and thermodynamic constants
XX CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
XX CC mechanistic inhibitors for mis-incorporation or chain termination.
XX CC Specifically, the short RNA template and primer pairs are useful in
XX CC screening assays which are used for determining kinetic, thermodynamic
XX CC and mechanistic properties of NS5B replication and ultimately in the
XX CC development of inhibitors of NS5B. Newly identified inhibitors of
XX CC replicase activity may be used for developing anti-HCV pharmaceuticals.
XX CC Sequences ABX99271-ABX99296 represent HCV NS5B replicase RNA synthesis
XX CC templates
XX SQ Sequence 14 BP; 2 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
      Query Match 0.6%; Score 12.4; DB 1; Length 14;
      Best Local Similarity 78.6%; Pred No. 2.9e+02;
      Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 1208 ATCAGGGGGGTGAC 1221
      :|||||||:
Db 1 AUCAGGGGGGCGGC 14

RESULT 475
ADE13944
ID ADE13944 standard; DNA; 14 BP.
XX AC ADE13944;
XX DT 29-JAN-2004 (first entry)
XX DE Optineurin promoter motif, repeat element or regulatory region #53.
XX KW Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
XX KW SNP; glaucoma; progressive ocular hypertensive disorder;
XX KW glaucoma related disorder; motif; repeat element; regulatory region.
XX
XX OS Homo sapiens.
XX FN US2003190617-A1.
XX PD 09-OCT-2003.
XX PF 06-MAR-2002; 2002US-00091281.
XX PR 06-MAR-2002; 2002US-00091281.
XX PA (SIEE/) SI E.
XX PA (RAYM/) RAYMOND V.
XX PA (MORI/) MORISSETTE J.
XX PI Raymond V, Morissette J, Si E;
XX DR WPI; 2003-864168/80.
XX PT New nucleic acid sequences of the optineurin gene are useful to detect
XX PT polymorphisms particularly single nucleotide polymorphisms in the
XX PT optineurin promoter to diagnose, prognose and treat glaucoma and related
XX PT disorders.
XX PS Claim 11; SEQ ID NO 55; 159pp; English.
XX CC The invention relates to an isolated nucleic acid (N1) comprising at
XX CC least 20 but not more than 1500 consecutive nucleotides of the optineurin
XX CC promoter appearing as ADE13890. Also included are the optineurin promoter
XX CC operably linked to a heterologous nucleic acid, a nucleic acid capable of
XX CC detecting a single nucleotide polymorphism (SNP) in the optineurin
XX CC promoter, a host cell comprising the promoter operably linked to a
XX CC heterologous sequence, diagnosing or prognosing glaucoma in a sample
XX CC obtained from a cell or bodily fluid (comprising detecting a polymorphism
XX CC in a promoter region of the optineurin gene, associated with a glaucoma
XX CC phenotype), detecting a SNP sequence variation in a sample containing
XX CC DNA, detecting the presence of an optineurin promoter sequence variation
XX CC in a sample containing DNA, determining the presence or increased
XX CC susceptibility to glaucoma or to a progressive ocular hypertensive
XX CC disorder resulting in loss of visual field in a patient (or the severity
XX CC or progression of glaucoma in a patient, comprising providing
XX CC amplification reaction primers that direct amplification of a selected
XX CC nucleic acid region containing the variation within the optineurin
XX CC promoter and amplifying the DNA) and detecting a polymorphism (comprising
XX CC obtaining a sample containing human genomic DNA, providing a nucleic acid
XX CC capable of detecting a SNP located within an optineurin promoter, and
XX CC detecting the polymorphism). The invention is used to diagnose and
XX CC prognose glaucoma and also to treat glaucoma related disorders. The
XX CC present sequence is an optineurin promoter motif, repeat element or
XX CC putative regulatory region.
XX SQ Sequence 14 BP; 4 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
      Query Match 0.6%; Score 12.4; DB 1; Length 14;
      Best Local Similarity 92.9%; Pred. No. 2.9e+02;
      Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1019 AAGAGGGGGGAGCTT 1032
      |||||
Db 1 AAGAGGGGGGAGCTT 14

RESULT 476
AAQ30739/C
ID AAQ30739 standard; DNA; 15 BP.
XX AC AAQ30739;
XX DT 25-MAR-2003 (revised)
XX DT 25-MAR-1993 (first entry)
XX DE DNA/RNA expression inhibiting modified oligomer.
XX

```

```
KW Treatment; cancer; viral; bacterial; infection; diagnosis; therapy; ss.
XX Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 13..15
FT /*tag= a
FT /*note= "T (OCH2O) T (OCH2O) T"
XX
XX WO9219637-A1.
XX
XX 12-NOV-1992.
XX
XX 24-APR-1992; 92WO-US003385.
XX
XX 24-APR-1991; 91US-00690786.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Matteucci M, Jones B, Lin K;
XX WPI; 1992-398793/48.
XX
XX New modified oligomers contg. thioacetel linkages - inhibit DNA and RNA
PT expression, useful for treating viral diseases, malignancy, bacterial
PT diseases and in diagnosis.
XX
XX Claim 1; Page 42; 69pp; English.
XX
XX The sequence is that of an oligonucleotide analogue, contg.
CC internucleoside thioacetel linkages, which is capable of binding DNA or
CC RNA. It is useful for therapeutic or diagnostic purposes, e.g. for
CC treating cancer or viral or bacterial infections. It also has the ability
CC to inhibit gene expression. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 15 BP; 0 A; 6 C; 0 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1016 AAAAAGAGGGGAG 1029
Db 15 AAAAAGAGGGGAG 2
RESULT 477
AAV28330/C
ID AAV28330 standard; DNA; 15 BP.
XX
XX AAV28330;
XX
XX 12-OCT-1998 (first entry)
XX
XX DNA EDTA probe (8) fragment.
XX
XX ss; probe; EDTA probe; specific sequence recognition;
KW chemotherapeutic agent; homopyrimidine-homopurine tract.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 22
FT /*tag= a
FT /*note= "EDTA thymidine"
XX
XX US5789155-A.
XX
XX 04-AUG-1998.
XX
XX 12-NOV-1993; 93US-00152250.
XX
XX 30-OCT-1987; 87US-00115922.
XX
PR 16-NOV-1990; 90US-00614205.
XX
XX (CALY ) CALIFORNIA INST OF TECHNOLOGY.
XX
XX Moser HE, Dervan PB;
XX WPI; 1998-446067/38.
XX
XX Detection of double-stranded nucleic acid sequence - with triplex-forming
PT oligonucleotide probe.
XX
XX Example 2; Fig 4B; 18pp; English.
XX
XX The EDTA probes 1-9 shown in sequences AAV28326-V28330 contain a single
CC thymidine with EDTA covalently attached at C-5. The probes are used for
CC specific recognition and cleavage of double-stranded DNA or RNA at a
CC sequence specific loci using a triple helix intermediary. The method
CC allows the delivery of chemotherapeutic agents in vivo and eliminates the
CC need to denature the DNA before the agent can act. The method allows
CC precise location of a chemotherapeutic agent or replacement gene sequence
CC at a specific homopyrimidine-homopurine tract anywhere in a large double-
CC stranded nucleic acid. This method allows diagnosis of gene based
CC diseases, and eliminates the need for many steps in the commonly used
CC diagnostic processes
XX
XX Sequence 15 BP; 0 A; 6 C; 0 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1016 AAAAAGAGGGGAG 1029
Db 15 AAAAAGAGGGGAG 2
RESULT 478
AAV60194
ID AAV60194 standard; DNA; 15 BP.
XX
XX AAV60194;
XX
XX 10-AUG-1999 (first entry)
XX
XX Target DNA for pyrimidinone derivative of the invention.
XX
XX Pyrimidinone derivative; labeled binding partner; diagnostic assay;
KW antisense; transfection complex; primer; probe; ss.
XX
XX Synthetic.
XX
XX WO924452-A2.
XX
XX 20-MAY-1999.
XX
XX 30-OCT-1998; 98WO-US023119.
XX
XX 07-NOV-1997; 97US-00966392.
XX
XX 10-NOV-1997; 97US-00966875.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Lin K, Matteucci MD;
XX WPI; 1999-370671/31.
XX
XX Composition comprising pyrimidinone derivatives for diagnostic and
PT analytical labels.
XX
XX Example 4; Page 88; 101pp; English.
XX
XX The specification describes pyrimidinone derivatives. These derivatives
CC are used as labeled binding partners, particularly as labels for
```

CC diagnostic, analytical and therapeutic applications. The derivatives are
 CC used as detectable labels for diagnostic assays, to enhance diagnostic
 CC assays that use oligonucleotides and to improve potency of
 CC oligonucleotides as antisense reagents that affect gene expression by
 CC altering intracellular metabolism of complementary RNA sequences encoding
 CC a target gene. They are also used in transfection complexes to deliver
 CC oligonucleotides into cell cytoplasm and in PCR e.g. as primers, and
 CC ligase chain reaction (LCR) e.g. as probes. The derivatives have
 CC increased affinity and specificity for their complementary sequences and
 CC facilitate PCR and LCR processes. The present sequence represents a
 CC target for pyrimidine derivatives of the invention
 XX
 SQ Sequence 15 BP; 9 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 1016 AAAAAGAGGGGAG 1029
 Db 1 AAAAAGAGGGGAG 14

RESULT 479
 AAX32408/c
 ID AAX32408 standard; DNA; 15 BP.

XX AAX32408;

XX 17-JUN-1999 (first entry)

XX Ab6 variable heavy (VH) chain CDR1 encoding DNA.

XX Agonist antibody; thrombopoietin receptor; TPO-R; thrombopoietin; DIC;
 XX megakaryocyte; platelet; immunological; hematopoietic; thrombocytopenia;
 XX bone marrow hypoplasia; disseminated intravascular coagulation; anemia;
 XX myelodysplasia; myelotoxic chemotherapy; leukaemia; tumour; MusK; CDR;
 XX neuromuscular; muscular dystrophy; complementarity determining region;
 XX variable heavy chain; variable light chain; VH; VL; ss.

XX Homo sapiens.

XX WO9910494-A2.

XX 04-MAR-1999.

XX 21-AUG-1998; 98WO-US017364.

XX 25-AUG-1997; 97US-00918148.

XX (GETH) GENENTECH INC.

XX Adams CW, Carter PJ, Fendly BM, Gurney AL;

XX WPI; 1999-204666/17.

XX P-PSDB; AAY06707.

XX New thrombopoietin receptor agonist antibodies - useful for treating
 XX immunological or hematological disorders.

XX Claim 10; Page 81; 86pp; English.

XX The invention relates to an agonist antibody (Ab) which binds to a
 XX thrombopoietin receptor (TPO-R). The antibodies which bind the TPO-R can
 XX be used in the same way and for the same indications as thrombopoietin
 XX (TPO). They can stimulate proliferation, differentiation or growth of
 XX megakaryocytes. They may also be able to stimulate megakaryocytes to
 XX increase platelet production. They can be used for treating immunological
 XX or hematopoietic disorders, especially thrombocytopenia. Thrombocytopenia
 XX -associated bone marrow hypoplasia (e.g. aplastic anemia following
 XX chemotherapy or bone marrow transplant) may be effectively treated with
 XX the antibody compounds as well as disorders such as disseminated
 XX intravascular coagulation (DIC), immune thrombocytopenia (HIV-induced and

CC non HIV-induced), chronic idiopathic thrombocytopenia, congenital
 CC thrombocytopenia, thrombotic thrombocytopenia and myelodysplasia. They
 CC can also be used in e.g. myelotoxic chemotherapy for treatment of solid
 CC tumours or leukaemia, myeloablative chemotherapy for autologous or
 CC allogeneic bone marrow transplant, myelodysplasia, idiopathic aplastic
 CC anemia, congenital thrombocytopenia, and immune thrombocytopenia. The
 CC antibodies which bind to the MusK receptor can be used for improving
 CC neuromuscular function in a patient, e.g. in muscular dystrophy. The
 CC products can also be used for detection and diagnosis. The antibodies
 CC have a longer half-life than the natural ligand for the TPO-R. Sequences
 CC AAX32387-X32413 represent DNA fragments encoding the CDR1, CDR2, and CDR3
 CC regions of variable heavy (VH) chains and variable light (VL) chains of
 CC antibodies Ab1 to Ab6

SQ Sequence 15 BP; 4 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 795 CTCCTGTAGTAAC 808
 Db 14 CTCAGTAGTAAC 1

RESULT 480

AAX62403/c

ID AAX62403 standard; RNA; 15 BP.

XX AAX62403;

XX 28-MAR-2000 (first entry)

XX Substrate for HH ribozyme HCV-298 which cleaves HCV RNA at nt. 298.

XX Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
 XX cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
 XX autoimmune disease; ss.

XX Hepatitis C virus.

XX WO9955847-A2.

XX 04-NOV-1999.

XX 26-APR-1999; 99WO-US009027.

XX 27-APR-1998; 98US-0083217P.

XX 18-SEP-1998; 98US-0100842P.

XX 25-FEB-1999; 99US-00257608.

XX 23-MAR-1999; 99US-00274553.

XX (RIBO-) RIBOZYME PHARM INC.

XX Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D;

XX WPI; 2000-062023/05.

XX Novel ribozymes for the treatment of diseases and conditions related to
 XX hepatitis C infection.

XX Claim 1; Page 50; 123pp; English.

XX The present sequence represents the preferred target sequence of an
 XX enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
 XX the Hepatitis C virus (HCV) RNA sequence at the base position given in
 XX the descriptor line. The HCV sequence was screened for optimal ribozyme
 XX target sites using a computer folding algorithm and regions of the mRNA
 XX which did not form secondary folding structures and contained potential
 XX ribozyme cleavage sites were identified. Ribozymes were synthesised to
 XX target these sites and their activities optimised by either varying the
 XX length of the binding arms or by modification to prevent degradation by
 XX nucleases. The ribozymes of the invention inhibit gene expression and/or

CC viral replication, and are used to treat diseases associated with
 CC Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and
 CC hepatocellular carcinoma. The ribozymes may be used in combination with
 CC interferon to treat HCV infection, other infectious diseases, autoimmune
 CC diseases, and cancer

SQ Sequence 15 BP; 2 A; 3 C; 6 G; 0 T; 4 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1200 ACCACCTATCAGG 1213
 | | | | | | | | | |
 Db 15 AGCACCTATCAGG 2

RESULT 481
 AAA29446
 ID AAA29446 standard; DNA; 15 BP.

XX AC AAA29446;

XX DT 08-AUG-2000 (first entry)

XX DE Hepatitis C virus modular capture oligonucleotide #11.

XX KW Primer extension product; modular oligonucleotide; identification;

XX KW hybridisation; probe; Hepatitis C virus; HCV; ss.

XX OS Hepatitis C virus.

XX PN WC200015842-A1.

XX PD 23-MAR-2000.

XX PF 15-SEP-1999; 99WO-GB003056.

XX PR 15-SEP-1998; 98US-00153242.

XX PR 16-SEP-1998; 98GB-00020185.

XX PA (DYNA-) DYNAL AS.

XX PA (JONE/) JONES E L.

XX PI Lundeberg J, Uhlen M;

XX WPI; 2000-271472/23.

XX PT Isolating primer extension products using modular oligonucleotides.

XX PS Example 1; Page 39; 74pp; English.

XX CC A method (I) has been developed of isolating primer extension products,
 CC produced from template vectors and containing sequences corresponding to
 CC or complementary to (i) to (iii) below, where the method comprises
 CC binding a modular oligonucleotide, comprising 2 parts (or modules), to
 CC adjacent stretches on the primer extension products (the modular
 CC oligonucleotide is complementary to and capable of binding to the vector
 CC derived sequences of the primer extension products and at least 1 module
 CC (the capture module) is immobilized or can be immobilised: (i) a primer
 CC binding region; (ii) an insert; and (iii) vector derived sequence(s).
 CC Also described is a method for determining the nucleotide sequence of a
 CC nucleic acid insert in a vector, in which sequencing products are
 CC generated by performing appropriate extension reaction on the vector, the
 CC sequencing products are isolated via (I) and the isolated products are
 CC separated by an appropriate technique and the labels carried on the
 CC sequencing products are visualised to allow determination of the sequence
 CC of the insert or a portion of it. (I) may be used for isolating primer
 CC extension products, particularly sequencing reaction products in which
 CC the products contain sequences corresponding or complementary to primer
 CC binding regions, inserts and vector derived sequences. The present
 CC sequence represents a modular capture oligonucleotide for a Hepatitis C
 CC virus (HCV) target sequence, which is used in an example from the present

CC invention

XX SQ Sequence 15 BP; 4 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1200 ACCACCTATCAGG 1213
 | | | | | | | | | |
 Db 1 AGCACCTATCAGG 14

RESULT 482

AAF47941

ID AAF47941 standard; DNA; 15 BP.

XX AC AAF47941;

XX DT 30-MAR-2001 (first entry)

XX DE IGFBP3 oligonucleotide #1361.

XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX OS Homo sapiens.

XX PN WC200078341-A1.

XX PD 28-DEC-2000.

XX PF 21-JUN-2000; 2000WO-AU000693.

XX PR 21-JUN-1999; 99US-0140345P.

XX PA (MURD-) MURDOCH CHILDRENS RES INST.

XX PI Wraight CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.

XX PS Example 7; Page 53; 201pp; English.

XX CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

XX SQ Sequence 15 BP; 3 A; 9 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCC 1098
 DB 2 CAGGCTTCACCCC 15

RESULT 483
 AAF47946
 ID AAF47946 standard; DNA; 15 BP.
 XX AC AAF47946;
 XX AC AAF47946;
 DT 30-MAR-2001 (first entry)
 DE IGFBP3 oligonucleotide #1366.
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX Homo sapiens.
 OS
 XX WO200078341-A1.
 XX PD 28-DEC-2000.
 XX PF 21-JUN-2000; 2000WO-AU000693.
 XX PR 21-JUN-1999; 99US-0140345P.
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX Example 7; Page 53; 201pp; English.
 XX The present invention relates to a method for ameliorating the effects of
 XX skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC diseases, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX Sequence 15 BP; 2 A; 10 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCC 1098
 DB 2 CAGGCTTCACCCC 15

RESULT 484
 AAF49432
 ID AAF49432 standard; DNA; 15 BP.
 XX AC AAF49432;
 XX AC AAF49432;
 DT 30-MAR-2001 (first entry)
 DE IGF-I oligonucleotide #392.
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX Homo sapiens.
 OS
 XX WO200078341-A1.
 XX PD 28-DEC-2000.
 XX PF 21-JUN-2000; 2000WO-AU000693.
 XX PR 21-JUN-1999; 99US-0140345P.
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX Example 8; Page 63; 201pp; English.
 XX The present invention relates to a method for ameliorating the effects of
 XX skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC diseases, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 899 CCTGGTTCATTTTC 912
 DB 1 CCTGGTTCATTTTC 14

XX IGF-I oligonucleotide #802.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;

XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

XX hyperneovascular condition; hyperplasia; kidney disease;

XX neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that

XX inhibits or reduces growth factor mediated cell proliferation and/or

XX inflammation.

XX Example 8; Page 66; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

XX skin disorders. The method comprises contacting the skin with an

XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

XX inhibiting or reducing growth factor mediated cell proliferation,

XX inflammation and/or other disorders. The present sequence is an

XX oligonucleotide which can be used to design the antisense

XX oligonucleotides of the present invention (see AAF45151 and AAF45153-

XX F45161). The method is useful for ameliorating the effects of psoriasis,

XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,

XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

XX hyperneovascular condition such as a neovascular condition of the retina,

XX brain or skin, growth factor-mediated malignancies, other sclerotic

XX disease, kidney disease, hyperproliferation of the inside of blood

XX vessels or any other hyperplasia

XX Sequence 15 BP; 4 A; 6 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;

Best Local Similarity 92.9%; Pred. No. 3.6e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1039 ACTACTACTAAGCC 1052

Db 2 ACTACTACTATGCC 15

RESULT 488

AAF49431

ID AAF49431 standard; DNA; 15 BP.

XX AC AAF49431;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #391.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;

KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

KW hyperneovascular condition; hyperplasia; kidney disease;

KW neovascular condition of the retina; ss.

OS Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that

XX inhibits or reduces growth factor mediated cell proliferation and/or

XX inflammation.

XX Example 8; Page 63; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

XX skin disorders. The method comprises contacting the skin with an

XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

XX inhibiting or reducing growth factor mediated cell proliferation,

XX inflammation and/or other disorders. The present sequence is an

XX oligonucleotide which can be used to design the antisense

XX oligonucleotides of the present invention (see AAF45151 and AAF45153-

XX F45161). The method is useful for ameliorating the effects of psoriasis,

XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,

XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

XX hyperneovascular condition such as a neovascular condition of the retina,

XX brain or skin, growth factor-mediated malignancies, other sclerotic

XX disease, kidney disease, hyperproliferation of the inside of blood

XX vessels or any other hyperplasia

XX Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;

Best Local Similarity 92.9%; Pred. No. 3.6e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 899 CCTGTGTCATTTC 912

Db 2 CCTGTGTCATCTTC 15

RESULT 489

AAF46484/C

ID AAF46484 standard; DNA; 15 BP.

XX AC AAF46484;

XX 30-MAR-2001 (first entry)

XX IGFBP2 oligonucleotide #1323.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;

XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 XX neovascular condition of the retina; ss.
 OS Homo sapiens.
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 XX 21-JUN-2000; 2000WO-AU000693.
 PF 21-JUN-1999; 99US-0140345P.
 PR (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PA Wright CJ, Werther GA, Edmondson SR;
 PI WPI; 2001-041421/05.
 XX
 DR
 XX
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 PS Example 6; Page 42; 201pp; English.
 XX
 CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide of the present invention (see AAP45151 and AAP45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 2 A; 0 C; 10 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1257 CCCCAACCCCTTC 1270
 DB 15 CCACACCCCTTC 2
 RESULT 490
 AAF49843
 ID AAF49843 standard; DNA; 15 BP.
 XX
 AC AAF49843;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #803.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

OS Homo sapiens.
 XX WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 XX 21-JUN-2000; 2000WO-AU000693.
 PF 21-JUN-1999; 99US-0140345P.
 PR (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PA Wright CJ, Werther GA, Edmondson SR;
 PI WPI; 2001-041421/05.
 XX
 DR
 XX
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 PS Example 8; Page 66; 201pp; English.
 XX
 CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide of the present invention (see AAP45151 and AAP45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 4 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1039 ACTACTACTAAGCC 1052
 DB 1 ACTACTACTATGCC 14
 RESULT 491
 AAF46485/C
 ID AAF46485 standard; DNA; 15 BP.
 XX
 AC AAF46485;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGFBP2 oligonucleotide #1324.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX
 OS Homo sapiens.
 XX WO200078341-A1.
 XX

PD 28-DEC-2000.
XX
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
XX
PR 21-JUN-1999; 99US-0140345P.
XX
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
XX
DR WPI; 2001-041421/05.
XX
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
XX
PS Example 6; Page 42; 201pp; English.
XX
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, seborrheoa, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 0 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1257 CCCCAACCCCTTC 1270
DB 14 CCACCAACCCCTTC 1
RESULT 492
ABX00259/c
ID ABX00259 standard; RNA; 15 BP.
XX
XX
AC ABX00259;
XX
XX
DT 23-DEC-2002 (first entry)
DE
DE Hepatitis C virus substrate #41 for HCV hammerhead ribozyme #41.
XX
XX
KW Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
KW type I interferon; interferon alpha; interferon beta; cyostatic;
KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
KW substrate; hammerhead ribozyme; HH ribozyme; ss.
XX
XX
OS Hepatitis C virus.
XX
XX
PN US2002082225-A1.
XX
XX
PD 27-JUN-2002.
XX
XX
PF 23-MAR-1999; 99US-00274553.
XX
XX
PR 23-MAR-1999; 99US-00274553.
XX

PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (ROBE/) ROBERTS B.
PA (PAVC/) PAVCO P A.
PA (MACE/) MACEJACK D.
XX
XX
PI Blact L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
XX
XX
DR WPI; 2002-617759/66.
XX
XX
PT New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
PT replication and are useful to treat hepatitis C virus infections and
PT cirrhosis, liver failure or hepatocellular carcinoma.
XX
XX
PS Claim 1; Page 22; 80pp; English.
XX
XX
CC The present invention relates to enzymatic nucleic acids which
CC specifically cleave RNA derived from Hepatitis C virus (HCV). The
CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
CC (HP) motif where the binding arms comprise sequences complementary to one
CC of the substrate sequences defined in the specification. The HCV
CC ribozymes are useful for modulating the expression and/or replication of
CC HCV. They can be used to treat cirrhosis, liver failure and/or
CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating
CC a condition associated with HCV infection in conjunction with one or more
CC other drug therapies, particularly type I interferon, especially
CC interferon alpha, beta or gamma or consensus interferon. The present
CC sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:
CC Some of the sequence data for this patent did not form part of the
CC printed specification. The complete sequence data for this patent was
CC obtained in electronic format directly from the USPTO web site at
CC seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ Sequence 15 BP; 2 A; 3 C; 6 G; 0 T; 4 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1200 ACCACCTTCAGG 1213
DB 15 AGCACCTTCAGG 2
RESULT 493
ABX01756
ID ABX01756 standard; RNA; 15 BP.
XX
XX
AC ABX01756;
XX
XX
DT 23-DEC-2002 (first entry)
DE
DE Hepatitis C virus (HCV) ribozyme related RNA sequence #25.
XX
XX
KW Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
KW type I interferon; interferon alpha; interferon beta; cyostatic; ss;
KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory.
XX
XX
OS Unidentified.
XX
XX
PN US2002082225-A1.
XX
XX
PD 27-JUN-2002.
XX
XX
PF 23-MAR-1999; 99US-00274553.
XX
XX
PR 23-MAR-1999; 99US-00274553.
XX
XX
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (ROBE/) ROBERTS B.

PA (PAVC/) PAVCO P A.
 PA (MACE/) MACEJACK D.
 XX
 XX Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
 XX WPI; 2002-617759/66.
 XX
 XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
 PT replication and are useful to treat hepatitis C virus infections and
 PT cirrhosis, liver failure or hepatocellular carcinoma.
 XX
 XX Disclosure; SEQ ID NO 1538; 80pp; English.
 XX
 XX The present invention relates to enzymatic nucleic acids which
 CC specifically cleave RNA derived from Hepatitis C virus (HCV). The
 CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
 CC (HP) motif where the binding arms comprise sequences complementary to one
 CC of the substrate sequences defined in the specification. The HCV
 CC ribozymes are useful for modulating the expression and/or replication of
 CC HCV. They can be used to treat cirrhosis, liver failure and/or
 CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating
 CC other drug therapies, particularly type I interferon, especially
 CC a condition associated with HCV infection in conjunction with one or more
 CC interferon alpha, beta or gamma or consensus interferon. The present
 CC sequence represents a RNA sequence of unknown function. Note: The present
 CC sequence is given in the sequence data but is not mentioned elsewhere in
 CC the specification. The complete sequence data for this patent was
 CC obtained in electronic format directly from the USPTO web site at
 CC seqdata.uspto.gov/psipsDIDEntry.html
 XX
 XX Sequence 15 BP; 5 A; 5 C; 3 G; 0 T; 2 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 78.6%; Pred. No. 3.6e+02;
 Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 1200 ACCACCTATCAGG 1213
 Db | |||||:|:|:|
 2 AGCACCCUACGAG 15
 RESULT 494
 ABX01757
 ID ABX01757 standard; RNA; 15 BP.
 XX
 AC ABX01757;
 XX
 XX 23-DEC-2002 (first entry)
 XX
 DE Hepatitis C virus (HCV) ribozyme related RNA sequence #26.
 XX
 KW Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
 KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
 KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
 KW type I interferon; interferon alpha; interferon beta; cytostatic; ss;
 KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory.
 XX
 OS Unidentified.
 XX
 XX US2002082225-A1.
 XX
 XX 27-JUN-2002.
 XX
 XX 23-MAR-1999; 99US-00274553.
 XX
 XX 23-MAR-1999; 99US-00274553.
 XX
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J A.
 PA (ROBE/) ROBERTS B.
 PA (PAVC/) PAVCO P A.
 PA (MACE/) MACEJACK D.
 XX

PI Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
 XX WPI; 2002-617759/66.
 XX
 XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
 PT replication and are useful to treat hepatitis C virus infections and
 PT cirrhosis, liver failure or hepatocellular carcinoma.
 XX
 XX Disclosure; SEQ ID NO 1539; 80pp; English.
 XX
 XX The present invention relates to enzymatic nucleic acids which
 CC specifically cleave RNA derived from Hepatitis C virus (HCV). The
 CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
 CC (HP) motif where the binding arms comprise sequences complementary to one
 CC of the substrate sequences defined in the specification. The HCV
 CC ribozymes are useful for modulating the expression and/or replication of
 CC HCV. They can be used to treat cirrhosis, liver failure and/or
 CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating
 CC a condition associated with HCV infection in conjunction with one or more
 CC interferon alpha, beta or gamma or consensus interferon. The present
 CC sequence represents a RNA sequence of unknown function. Note: The present
 CC sequence is given in the sequence data but is not mentioned elsewhere in
 CC the specification. The complete sequence data for this patent was
 CC obtained in electronic format directly from the USPTO web site at
 CC seqdata.uspto.gov/psipsDIDEntry.html
 XX
 XX Sequence 15 BP; 4 A; 6 C; 3 G; 0 T; 2 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 78.6%; Pred. No. 3.6e+02;
 Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 1200 ACCACCTATCAGG 1213
 Db | |||||:|:|:|
 1 AGCACCCUACGAG 14
 RESULT 495
 ABX93418/C
 ID ABX93418 standard; DNA; 15 BP.
 XX
 AC ABX93418;
 XX
 XX 27-MAY-2003 (first entry)
 XX
 DE Sequence specific duplex binding oligonucleotide #1.
 XX
 KW Triplex DNA; internucleoside linkage; oligonucleotide-based diagnosis;
 KW triplex binding; absorption matrix; immobilised enzyme; process control;
 KW immunoassay reagent; pendant functionality; cation exchange agent;
 KW molecular sieve; textile; fibre; film; formed article; ss;
 KW polyfunctional surfactant; triplex affinity capture purification.
 XX
 OS Synthetic.
 XX
 XX US6495672-B1.
 XX
 XX 17-DEC-2002.
 XX
 XX 21-NOV-2000; 2000US-00717422.
 XX
 XX 09-AUG-1996; 96US-0023241P.
 XX 05-AUG-1997; 97US-00906378.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Froehler BC, Gutierrez AJ, Matteucci MD;
 XX WPI; 2003-340428/32.
 XX
 XX New oligonucleotide compound with internucleoside linkages useful in
 PT oligonucleotide-based diagnosis comprises at least one nucleoside
 PT

selected from 2-aminopyridine or 2-pyridone C-nucleosides.

Example 7; Col 24; 17pp; English.

The invention describes an oligonucleotide compound with internucleoside linkages comprising at least one nucleoside. The compounds are used in oligonucleotide-based diagnosis to detect presence or absence of target gene sequences to which they specifically bind and separation through triplex binding. They are also useful as linkers or spacers in preparing absorption matrices, immobilised enzymes for process control or immunoassay reagents; as monomers to provide access to polymers having pendant functionalities; as cation exchange agents in the preparation of molecular sieves, textiles, fibres, films and formed articles; and as polyfunctional surfactants. The composition improves triplex affinity capture purification and enhances triplex binding. This sequence represents a novel oligonucleotide capable of binding to a polynucleotide duplex to form a triplex structure useful in diagnosis

SQ Sequence 15 BP; 0 A; 6 C; 0 G; 9 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1016 AAAAAGAGGGGAG 1029
 |||||
 Db 15 AAAAAGAGGGGAG 2

RESULT 496

ABX16337/C
 ID ABX16337 standard; DNA; 15 BP.

AC ABX16337;

XX 24-APR-2003 (first entry)

DE DNase footprint target sequence, Select I.

XX DNase footprint; ds; target; 2-aminopyridine C-nucleoside;
 KW 2-pyridone C-nucleoside; triple helix; cation exchange agent;
 KW molecular sieve; textile; fibre; film; formed article;
 KW polyfunctional surfactant; phase transfer agent;
 KW phase transfer catalyst; liquid/liquid ion extraction;
 KW optically active material; affinity absorption matrix;
 KW immobilised enzyme; immunoassay reagent.

XX Synthetic.

XX US6447998-B1.

XX 10-SEP-2002.

XX 05-AUG-1997; 97US-00906378.

XX 09-AUG-1996; 96US-0023241P.

XX (ISIS-) ISIS PHARM INC.

XX Froehler BC, Gutierrez AJ, Matteucci MD;

XX WPI; 2003-196641/19.

XX Novel 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound
 useful for preparing oligonucleotides which are used for detecting
 specific DNA duplexes in samples.

XX Example 7; Col 23; 18pp; English.

XX The invention relates to a 2-aminopyridine C-nucleoside or 2-pyridone C-
 nucleoside compound, its salt, solvates, resolved enantiomers or purified
 diastereomers of formula detailed in the specification. Also included is
 an oligomer compound comprising a multiplicity of nucleosides linked by

CC internucleoside linkages where at least one nucleoside is a modified
 CC nucleoside comprising a 2-aminopyridine C-nucleoside or 2-pyridone C-
 CC nucleoside, its salts, solvates, resolved enantiomers or purified
 CC diastereomers. The oligomer is useful for detecting the presence, absence
 CC or amount of a particular DNA duplex in a sample suspected of containing
 CC DNA. The method involves contacting the sample with the oligomer under
 CC conditions where a triple helix is formed between the oligomer and the
 CC particular DNA duplex. The 2-aminopyridine C-nucleoside or 2-pyridone C-
 CC nucleoside compound is useful for preparing oligonucleotides which are
 CC useful in oligonucleotide-based diagnosis and separation through triplex
 CC binding, as monomers to provide access to polymers having unique pendant
 CC functionalities, as comonomers with monomers, for preparing polymers
 CC (which are useful as cation exchange agents in the preparation of
 CC polyfunctional surfactants, as phase transfer agents, in phase transfer
 CC catalysis and liquid/liquid ion extraction, in the synthesis or
 CC resolution of other optically active materials, and as linkers or spacers
 CC in preparing affinity absorption matrices, immobilised enzymes for
 CC process control, or immunoassay reagents. The present sequence is a
 CC target sequence (contained in a 370bp restriction fragment) for modified
 CC oligonucleotides containing 2-aminopyridine C-nucleoside or 2-pyridone C-
 CC nucleosides, used in a DNase footprint assay

XX SQ Sequence 15 BP; 0 A; 6 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;

Best Local Similarity 92.9%; Pred. No. 3.6e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1016 AAAAAGAGGGGAG 1029
 |||||
 Db 15 AAAAAGAGGGGAG 2

RESULT 497

ABZ75384
 ID ABZ75384 standard; DNA; 15 BP.

XX AC ABZ75384;

XX 07-MAY-2003 (first entry)

DE Synthetic nuclease-resistant oligomeric compound #40.

XX Nuclease resistant; ds; pharmaceutical; topical administration;
 KW transdermal patch; enzymatic degradation resistant.

XX Synthetic.

XX WO2003004602-A2.

XX 16-JAN-2003.

XX 01-JUL-2002; 2002WO-US020934.

XX 03-JUL-2001; 2001US-0302682P.

XX 28-NOV-2001; 2001US-00996292.

XX 10-DEC-2001; 2001US-00013295.

XX (ISIS-) ISIS PHARM INC.

XX Manoharan M, Maier MA, Prakash TP, Rajeev KG;

XX WPI; 2003-256318/25.

XX Nuclease-resistant oligomeric compound useful as pharmaceuticals for
 PT topical administration such as transdermal patches.

XX Example 58; Page 104; 234pp; English.

XX The invention relates to novel nuclease-resistant oligomeric compounds.
 CC The compounds of the invention are useful as pharmaceuticals for topical
 CC administration such as transdermal patches. The oligomeric compound is

CC resistant to enzymatic degradation. The sequences shown in ABZ75345-
 CC ABZ75399 represent the nuclease-resistant compounds of the invention
 XX
 SQ Sequence 15 BP; 9 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1016 AAAAAGAGGGGAG 1029
 |||||
 Db 1 AAAAAGAGGGGAG 14

RESULT 498
 ADC13352
 ID ADC13352 standard; DNA; 15 BP.
 XX
 AC ADC13352;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE K53 and K54 SAGE library over-expression showing tag, SEQ ID No 19.
 XX
 KW marker gene; tumour; Kaposi's Sarcoma; peripheral blood mononuclear cell;
 KW PMBC; expressed keratin 14; TIE 1; Sallodhesin; Siglec 1; angiogenesis;
 KW drug target; tag; SAGE library; K53; K54; ss.
 XX
 OS Unidentified.
 XX
 PN EP1298221-A1.
 XX
 PD 02-APR-2003.
 XX
 PF 28-SEP-2001; 2001EP-00203703.
 XX
 PR 28-SEP-2001; 2001EP-00203703.
 XX
 PA (PRIM-) PRIMAGEN HOLDING BV.
 XX
 PI Van Der Kuyt AC, Cornelissen M;
 XX
 DR WPI; 2003-589342/56.

XX
 PT Determining whether a treatment is effective in changing a status of a
 PT certain set of target cells in an individual comprises determining
 PT whether the sample comprises an expression product of at least one marker
 PT gene.

PS Disclosure; SEQ ID NO 19; 94pp; English.
 XX
 CC The invention relates to a novel method for determining whether a
 CC treatment is effective in changing a status of a certain set of target
 CC cells in an individual. The method comprises obtaining a sample from an
 CC individual after initiation of the treatment; and determining whether the
 CC sample comprises an expression product of at least one marker gene. The
 CC marker gene and a proteinaceous molecule (which can bind to the protein
 CC derived from the marker gene of the invention) are useful for determining
 CC whether a treatment is effective in counteracting a tumour in an
 CC individual, especially Kaposi's Sarcoma. Peripheral blood mononuclear
 CC cell (PMBC) expressed keratin 14, TIE 1, Sallodhesin, or Siglec 1
 CC sequences or a fully defined sequence given in the specification, or
 CC their analogues are useful as indicators for angiogenesis and for
 CC detecting the presence of a tumour cell in an individual. The expression
 CC product of a gene comprising a marker gene of the invention is useful as
 CC a drug target. The compound is useful for preparing a medicament. This
 CC polynucleotide sequence represents a tag sequence which showed over-
 CC expression in Kaposi's Sarcoma SAGE libraries K53 and K54 of the
 CC invention.

XX
 SQ Sequence 15 BP; 4 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;

Best Local Similarity 92.9%; Pred. No. 3.6e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 760 CATGCAGGTTTCTT 773
 |||||
 Db 1 CATGCAGGTTTCTT 14

RESULT 499
 AAA93899
 ID AAA93899 standard; DNA; 16 BP.
 XX
 AC AAA93899;
 XX
 DT 15-JAN-2001 (first entry)
 XX
 DE Beta-3-Gla T3 exon 1 splice site sequence.
 XX
 KW Beta-1,3 galactose transferase; treatment; diagnosis; cancer; human;
 KW digestive system; ss.
 XX
 OS Synthetic.
 OS
 PN WC200050608-A1.
 XX
 PD 31-AUG-2000.
 XX
 PF 24-FEB-2000; 2000WO-JP001070.
 XX
 PR 25-FEB-1999; 99JP-00047571.
 XX
 PA (KYOW) KYOWA HAKKO KOGYO KK.
 XX
 PI Narimatsu H, Isshiki S, Togayachi A, Sasaki K;
 XX
 DR WPI; 2000-549409/50.

PT Beta-1,3 galactose transferase and DNA encoding it, useful for synthesis
 PT of type 1 sialyl Lewis, a carbohydrate for treatment of digestive system
 PT cancer.

XX
 PS Example 5; Page 79; 123pp; Japanese.

XX
 CC This invention relates to a polypeptide (I) with beta-1,3 galactose
 CC transferase activity, or variants of (I) comprising amino acid additions,
 CC deletions and/or substitutions. Included in the invention is DNA encoding
 CC all or part of (I); expression vectors containing the DNA, host cells
 CC transformed by the vectors; a method for the preparation of the
 CC polypeptide by culture of the transformants or by expression in the milk
 CC of a transgenic mammal, and antibodies recognising (I). The Beta-1,3
 CC galactose transferase protein transfers galactose by beta-1,3 bonding to
 CC N-acetylglucosamine present in a non-cyclic carbohydrate chain (such as
 CC GlcNAc-beta1-3Gal-beta1-4Glc) to give Gal-beta1-3GlcNAc. The protein and DNA
 CC encoding it are useful for the treatment and diagnosis of cancer of the
 CC digestive system. The present sequence represents a Beta-Gal-T5 exon
 CC intron boundary splice site sequence

XX
 SQ Sequence 16 BP; 3 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 16;
 Best Local Similarity 92.9%; Pred. No. 4.4e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 759 CCATGCAGGTTTCTT 772
 |||||
 Db 1 CCAAGCAGGTTTCTT 14

RESULT 500
 AAS56856/c
 ID AAS56856 standard; DNA; 16 BP.
 XX
 AC AAS56856;

KW 16-JAN-2002 (first entry)
 KW Validation ribozyme DNA sequence #30.
 KW Human; BRCA-1 regulator; ribozyme; BR1; RNA target recognition; probe;
 KW cytosolic; RNA cleavage; tumour suppressor; PCR primer; CHLR2; AF6; BR2;
 KW inhibitor dominant negative 4; breast basic conserved protein 1; BBCL1;
 KW BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.
 XX Homo sapiens.
 OS WO200170982-A2.
 XX 27-SEP-2001.
 XX 23-MAR-2001; 2001WO-US009559.
 XX 23-MAR-2000; 2000US-00536058.
 XX (IMMU-) IMMUSOL INC.
 PA (BEGE/) BEGER C.
 PA Begier C, Barber J, Wong-Staal F;
 PI WPI; 2001-611503/70.
 XX Novel polypeptides that are the regulators of BRCA-1, useful for treating
 XX cancer and diagnosing the presence of neoplastic cells in biological
 XX sample.
 XX Disclosure; Fig 8; 97pp; English.
 XX Sequences AAS56729-AAS56968 represent DNA encoding BRCA-1 regulators,
 CC ribozyme target recognition RNA sequences, DNA fragments encoding the RNA
 CC and primers used in the methods of the invention. Hybridisation of
 CC ribozymes to their targets results in cleavage of the RNA target. The
 CC ribozymes can be used to cleave regulators of the tumour suppressor BRCA-
 CC 1, resulting in upregulation or downregulation of BRCA-1 in a cell. The
 CC mRNA targets include those encoding the BRCA-1 regulator BR1, inhibitor
 CC dominant negative 4 (ID4), breast basic conserved protein 1 (BBCL1),
 CC CHLR2, AF6, BR2 and BR3. Regulation of BRCA-1 is useful for treating and
 CC diagnosing cancer and other proliferative disorders. The severity of an
 CC incidence of cancer can be lessened by regulating tumour proliferation
 CC through modulation of BRCA-1 expression. The sequences of the invention
 CC are useful in the development of anti-cancer drugs
 XX Sequence 16 BP; 0 A; 2 C; 6 G; 8 T; 0 U; 0 Other;
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 16;
 Best Local Similarity 92.9%; Pred. No. 4.4e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 734 AGAAACAGAACACC 747
 |||||
 Db 15 AGAAACAGAACACC 2
 RESULT 501
 ABK02379
 ID ABK02379 standard; RNA; 17 BP.
 XX AC ABK02379;
 XX 12-MAR-2002 (first entry)
 XX Human NOGO Amberzyme #51.
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNAzyme; inozyme; G-cleaver; amberzyme; zincyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 OS Homo sapiens.
 OS Synthetic.
 XX WO200159103-A2.
 XX 16-AUG-2001.
 XX 09-FEB-2001; 2001WO-US004273.
 XX 11-FEB-2000; 2000US-0181797P.
 XX 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX Blatt L, Mcswiggen J, Chowrira BM;
 PI WPI; 2001-607195/69.
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 XX constructs, which down regulate expression of a CD20 gene or neurite
 XX growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 XX central nervous system injury.
 XX Claim 88; Page 131; 200pp; English.
 XX The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNAzyme) or an inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberzyme (cleaving RNA with an NGN triplet), a zincyme (cleaving RNA
 CC with a VGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an amberzyme molecule of the invention
 XX Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 71.4%; Pred. No. 5.3e+02;

Matches 10; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1506 GCTGGAGTCTGG 1519
 ||:||||:|:|
 Db 3 GCUGAGGUGCUG 16

RESULT 502
 AAT81535/c
 ID AAT81535 standard; RNA; 17 BP.
 XX
 AC AAT81535;
 XX
 DT 14-DEC-1997 (first entry)
 XX
 DE Human c-myb hammerhead ribozyme target sequence (nt. position 2816).
 XX
 KW Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
 KW smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
 KW coronary angioplasty; ss.
 XX
 OS Homo sapiens.
 XX
 PN W09531541-A2.
 XX
 PD 23-NOV-1995.
 XX
 PF 18-MAY-1995; 95WO-US006368.
 XX
 PR 18-MAY-1994; 94US-00245466.
 PR 13-JAN-1995; 95US-00373124.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Stinchcomb DT, Draper K, Meswigen J, Jarvis T;
 DR WPI; 1996-010927/01.
 XX
 PT New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
 PT for treating restenosis or cancer.
 XX
 PS Claim 1; Page 77; 128pp; English.
 XX
 CC The present sequence represents the preferred target sequence for an
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
 CC the human c-myb sequence at the base position indicated in the descriptor
 CC line. The c-myb sequence was screened for optimal ribozyme target sites
 CC using a computer folding algorithm, and regions of the mRNA which did not
 CC form secondary folding structures and contained potential ribozyme
 CC cleavage sites were identified. Ribozymes were synthesised and their
 CC activities optimised by either varying the length of the binding arms or
 CC by modification to prevent degradation by nucleases. The ribozymes cleave
 CC the c-myb sequence and can be used to prevent smooth muscle cell
 CC hyperproliferation in restenosis, especially after coronary angioplasty,
 CC and in cancers
 XX
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 977 CCAAGCTCTACTCC 990
 ||:|||||:|
 Db 17 CCAAGCTCTACTGC 4

RESULT 503
 AAX75237/c
 ID AAX75237 standard; RNA; 17 BP.
 XX
 AC AAX75237;
 XX

28-JUL-1999 (first entry)
 Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #765.
 Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 foetal liver kinase 1; ss.
 Mus sp.
 WO9715662-A2.
 01-MAY-1997.
 25-OCT-1996; 96WO-US017480.
 26-OCT-1995; 95US-0005974P.
 11-JAN-1996; 96US-00584040.
 (RIBO-) RIBOZYME PHARM INC.
 (CHIR) CHIRON CORP.
 Pavco P, Meswigen J, Stinchcomb D, Escobedo J;
 WPI; 1997-259017/23.
 Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 rheumatoid arthritis, etc., in a human patient.
 Claim 4; Page 178; 218pp; English.
 The present invention describes nucleic acid molecules which modulate the
 synthesis, expression and/or stability of a mRNA encoding 1 or more
 receptors of vascular endothelial growth factor (VEGF). A patient
 (preferably human) having a condition associated with the level of the
 fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 treated by administering the nucleic acid molecule or the expression
 vector to the patient. AAX67275 to AAX75752 represent specific examples
 of nucleic acid molecules from the present invention
 Sequence 17 BP; 4 A; 6 C; 4 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1166 GTCCCAACTTTGGG 1179
 ||:|||||:|
 Db 14 GTCCCAACTTTGGG 1

RESULT 504
 AAX69007/c
 ID AAX69007 standard; RNA; 17 BP.
 XX
 AC AAX69007;
 XX
 DT 28-JUL-1999 (first entry)
 XX
 DE Human flt1 VEGF receptor hammerhead ribozyme substrate #302.
 XX
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX
 OS Homo sapiens.

```

XX PN WO9715662-A2.
XX PD 01-MAY-1997.
XX PF 25-OCT-1996; 96WO-US017480.
XX PR 26-OCT-1995; 95US-0005974P.
XX PR 11-JAN-1996; 96US-00584040.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR ) CHIRON CORP.
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX PF WPI; 1997-259017/23.
XX DR Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX PT rheumatoid arthritis, etc., in a human patient.
XX PS Claim 4; Page 55; 218pp; English.
XX XX
XX CC The present invention describes nucleic acid molecules which modulate the
XX CC synthesis, expression and/or stability of a mRNA encoding 1 or more
XX CC receptors of vascular endothelial growth factor (VEGF). A patient
XX CC (preferably human) having a condition associated with the level of the
XX CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX CC treated by administering the nucleic acid molecule or the expression
XX CC vector to the patient. AAX67275 to AAX75752 represent specific examples
XX CC of nucleic acid molecules from the present invention
XX XX
XX SQ Sequence 17 BP; 6 A; 1 C; 5 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1163 ACTGTCCCAACTTT 1176
Db 17 ACAGTCCCAACTTT 4
RESULT 505
AAX62347/c
ID AAX62347 standard; RNA; 17 BP.
XX AC AAX62347;
XX OS Homo sapiens.
XX PN WO9710328-A2.
XX PD 16-JUL-1999 (first entry)
XX DE Granule bound starch synthase hammerhead substrate SEQ ID NO:222.
XX KW Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
XX KW granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;
XX KW modulation; gene expression; transgenic plant; cleavage; canola plant;
XX KW caffeine synthesis; coffee plant; nicotine production; tobacco;
XX KW fruit ripening; flower pigmentation; lignin production; ss.
XX OS Zea mays.
XX PN WO9710328-A2.
XX PD 20-MAR-1997.
XX PF 12-JUL-1996; 96WO-US011689.
XX PR 13-JUL-1995; 95US-0001135P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (DOWC ) DOWELANCO.
XX XX
XX PI Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;
XX PI Young SA, Folkerts O, Merlo DJ;
XX XX WPI; 1997-202224/18.
XX DR Ribozyme which modulates plant gene expression - preferably modulates
XX PT expression of DELTA-9 desaturase or granule bound starch synthase in
XX PT maize or canola.
XX PF Claim 41; Page 75; 155pp; English.
XX XX
XX CC The present invention describes an enzymatic nucleic acid molecule (I)
XX CC with RNA cleaving activity, which modulates the expression of a plant
XX CC gene. Also described is a gene comprising a cDNA sequence encoding maize
XX CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,
XX CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)
XX CC gene, in a plant (preferably a maize or canola plant). (I) can be used to
XX CC modulate caffeine synthesis in a coffee plant, nicotine production in a
XX CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
XX CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
XX CC marigold plant or lignin production in a tobacco, aspen, poplar or pine
XX CC plant
XX XX
XX SQ Sequence 17 BP; 4 A; 4 C; 8 G; 0 T; 1 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1241 TCGCTCCGACCCC 1254
Db 17 TCGCTTCGACCCC 4
RESULT 506
AAX97280/c
ID AAX97280 standard; RNA; 17 BP.
XX AC AAX97280;
XX DT 17-MAR-1999 (first entry)
XX DE Human EGF-R target sequence nucleotide position 456.
XX KW Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
XX KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
XX KW cancer; genetic drift; detection; mutation; ss.
XX OS Homo sapiens.
XX PN WO9833893-A2.
XX PD 06-AUG-1998.
XX PF 14-JAN-1998; 98WO-US000730.
XX PR 31-JAN-1997; 97US-0036476P.
XX PR 04-DEC-1997; 97US-00985162.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (UYAS-) UNIV ASTON.
XX PI Akhtar S, Fell P, Mcswiggen JA;
XX XX WPI; 1998-437449/37.
XX DR Enzymatic nucleic acids - which cleave RNA derived from an epidermal
XX PT growth factor receptor, useful for inhibiting cell proliferation and for
XX PT treating cancers.
XX PS Claim 5; Page 69; 109pp; English.
XX XX

```


CC The present invention describes enzymatic nucleic acid molecules (NAMs)
 CC which specifically cleave RNA derived from an epidermal growth factor
 CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
 CC represent specifically claimed target sequence from human EGF-R. AAV98044
 CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
 CC hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
 CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR
 CC expression levels e.g. to inhibit cell proliferation in the prevention or
 CC treatment of cancers. The NAMs can also be used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of EGF-R RNA in a cell

XX SQ Sequence 17 BP; 2 A; 6 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 863 AGGCACTGAGGAC 876
 Db 17 AGGCACTGAGGAC 4

RESULT 507
 AAX76129/C
 ID AAX76129 standard; DNA; 17 BP.

XX AC AAX76129;
 XX DT 03-AUG-1999 (first entry)

XX DE Human Toso protein PCR primer #6.

XX KW Toso protein; tumour necrosis factor mediated apoptosis inhibition;
 KW TNF mediated apoptosis; T cell overactivity; autoimmune disease;
 KW Sjogrens connective tissue disorder; transplant rejection; cancer;
 KW PCR primer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO9925832-A1.

XX PD 27-MAY-1999.

XX PF 16-NOV-1998; 98WO-US024391.

XX PR 17-NOV-1997; 97US-0066063P.

XX PR 17-AUG-1998; 98US-00132338.

XX PA (STRD) UNIV LELAND STANFORD JUNIOR.

XX PI Nolan GP, Hitoshi Y;

XX PS WPI; 1999-338007/28.

XX PT DNA encoding Toso, a protein having inhibitory effects on TNF mediated
 PT apoptosis.

XX PS Example 4; Page 43; 70pp; English.

XX CC The present invention describes a Toso protein (I). (I) has anti-
 CC apoptotic and cytostatic activity. Toso (named after a Japanese liquor
 CC that is drunk on New Year's Day to celebrate long life and eternal youth)
 CC most likely acts by induction of cFLIP expression which inhibits caspase-
 CC 8 processing. Recombinant (I) can be used to modulate apoptosis in a cell
 CC or to treat an apoptosis related condition in a mammal. Apoptosis related
 CC conditions can also be treated by administration of the Toso protein or
 CC antibody. Apoptosis related or mediated conditions that can be treated
 CC include diseases characterized by T cell overactivity, e.g. Sjogrens
 CC connective tissue disorder, autoimmune diseases, diseases where T cells
 CC actively destroy cells, including transplant rejection and conditions
 CC where cells of any kind that are not dying express Toso appropriately,

CC e.g. cancer of T or B cell origin (where increased apoptosis would be
 CC appropriate). The present sequence represents a PCR primer used in an
 CC example from the present invention

XX SQ Sequence 17 BP; 2 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1253 CCATCCCCAACCCC 1266
 Db 16 CTATCCCCAACCCC 3

RESULT 508
 AAA23121
 ID AAA23121 standard; RNA; 17 BP.

XX AC AAA23121;

XX DT 19-JUN-2000 (first entry)

XX DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6347.

XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 KW age related macular degeneration; inflammation; neovascular glaucoma;
 KW myopic degeneration; psoriasis; verruca vulgaris; angiobroma;
 KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX OS Homo sapiens.

XX PN WO9950403-A2.

XX PD 07-OCT-1999.

XX PF 24-MAR-1999; 99WO-US006507.

XX PR 27-MAR-1998; 98US-0079678P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;

XX PS WPI; 1999-591315/50.

XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
 PT of an mRNA encoding an angiogenic factors.

XX PS Claim 54; Page 263; 305pp; English.

XX CC The present invention describes enzymatic nucleic acid molecules with RNA
 CC cleaving activity, which specifically cleave RNA encoded by an aryl
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
 CC AAA21596 to AAA21688 represent their corresponding target sequences;
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
 CC AAA3422 represent their corresponding target sequences. The ribozymes of
 CC the invention are used for modulating the synthesis, expression and/or
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,

CC	AA21689	to AA22475	and AA23263	to AA23342	represent ribozyme sequence
CC	for	integrin subunit beta-3,	and AA22476	to AA23262,	AA23343 to
CC	AA23422	represent their corresponding target sequences.	The ribozymes of		
CC	the invention	are used for modulating the synthesis, expression and/or			
CC	stability of an mRNA encoding angiogenic factor, especially ARNT,				
CC	integrin subunit beta-3,	integrin subunit alpha-6, or Tie-2.	They are		
CC	especially used to treat cancer, diabetic retinopathy, age related				
CC	macular degeneration (ARMD), inflammation, and arthritis, as well as				
CC	neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,				
CC	angioblastoma of tuberous sclerosis, pot-wine stains, Sturge Weber				
CC	syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,				
CC	and other syndromes and diseases related to the levels of ARNT, Tie-2,				
CC	integrin subunit alpha-6, or integrin subunit beta-3				
XX					
XX					
SQ	Sequence	17 BP; 2 A; 4 C; 3 G; 0 T; 8 U; 0 Other;			
Query Match 0.6%; Score 12.4; DB 1; Length 17;					
Best Local Similarity 92.9%; Pred.No. 5.3e+02;					
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0					
QY	868	ACTGAGGACTCAGG	881		
DB	15	ACTGAGGACTCAAG	2		
RESULT 510					
AAZ25432/C					
ID	AAZ25432	standard; DNA; 17 BP.			
XX					
AC	AAZ25432;				
XX					
DT	17-DEC-1999	(first entry)			
XX					
DE	Human Toso PCR primer #8.				
XX					
KW	Human; Toso protein; target; drug screening; diagnosis; apoptosis;				
KW	apoptosis related disease; PCR primer; ss.				
OS	Synthetic.				
OS	Homo sapiens.				
XX					
EN	WO9950671-A2.				
XX					
PD	07-OCT-1999.				
XX					
Pf	30-MAR-1999;	99WO-US0006945.			
XX					
PR	30-MAR-1998;	98US-00050861.			
XX					
PA	(RIGE-) RIGEL PHARM INC.				
PI	Payan D;				
PT					
XX					
DR	WPI; 1999-591379/50.				
XX					
PT	Screening agents useful for modulating apoptosis and controlling				
ET	apoptosis related diseases.				
XX					
PS	Example 4; Page 53; 75pp; English.				
XX					
The present invention describes a method of Screening for a bioactive agent capable of binding a Toso protein. Also described a methods for:					
CC	(1) screening a bioactive agent capable of modulating activity of a Toso				
CC	cell-surface receptor, comprising adding a candidate bioactive agent to a				
CC	cell comprising a recombinant Toso nucleic acid, and exposing the cells				
CC	to an apoptotic agent that will induce apoptosis; (2) modulating				
CC	apoptosis comprising administering an exogenous compound that binds Toso,				
CC	to a cell; (3) identifying a cell containing a mutant Toso gene,				
CC	comprising determining it's sequence; (4) identifying the Toso genotype,				
CC	comprising determining the sequence of at least one Toso gene; and (5)				
CC	diagnosing an apoptosis related condition, comprising measuring activity				
CC	of Toso in a tissue, and comparing to the activity from non-affected				
CC	individual's tissue, where a reduced activity of the patient indicates				

CC risk of an apoptosis related condition. The methods are useful for
 CC identifying agents capable of diagnosing and treating apoptosis related
 CC disease, their use for modulating apoptosis, and methods for diagnosing
 CC the disease state. The present sequence represents a PCR primer for the
 CC human Toso protein, which is used in an example from the present
 CC invention
 CC
 XX Sequence 17 BP; 2 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1253 CCATCCCAACCC 1266
 DB 16 CTATCCCAACCC 3
 RESULT 511
 AAF07187
 ID AAF07187 standard; DNA; 17 BP.
 XX
 AC AAF07187;
 XX
 DT 16-FEB-2001 (first entry)
 DE Hammerhead ribozyme substrate #3444.
 XX
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2000061729-A2.
 PD 19-OCT-2000.
 XX
 PF 11-APR-2000; 2000WO-US009721.
 XX
 PR 12-APR-1999; 99US-0129390P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
 XX
 DR WPI; 2000-647423/62.
 XX
 PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 XX
 PS Claim 54; Page 135; 164pp; English.
 XX
 CC The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX
 XX Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1066 CCAAGCTTCAGTCC 1079
 DB 1 CCAAGCTTCGTGCC 14

RESULT 512
 AAF01953
 ID AAF01953 standard; DNA; 17 BP.
 XX
 AC AAF01953;
 XX
 DT 16-FEB-2001 (first entry)
 DE Hammerhead ribozyme substrate #248.
 XX
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2000061729-A2.
 PD 19-OCT-2000.
 XX
 PF 11-APR-2000; 2000WO-US009721.
 XX
 PR 12-APR-1999; 99US-0129390P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
 XX
 DR WPI; 2000-647423/62.
 XX
 PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 XX
 PS Claim 37; Page 61; 164pp; English.
 XX
 CC The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX
 XX Sequence 17 BP; 4 A; 11 C; 0 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1250 ACCCATCCCAAC 1263
 DB 2 ACCCATCCCAAC 15
 RESULT 513
 ABK00748
 ID ABK00748 standard; RNA; 17 BP.
 XX
 AC ABK00748;
 XX
 DT 12-MAR-2002 (first entry)
 DE Human Nogo Inozyme #18.
 XX
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; Nogo; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberszyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;

KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX Homo sapiens.
 OS Synthetic.
 OS
 XX WO200159103-A2.
 XX
 XX 16-AUG-2001.
 XX
 XX 09-FEB-2001; 2001WO-US004273.
 XX
 XX 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX
 XX Blatt L, Mcswiggen J, Chowrira BM;
 XX WPI; 2001-607195/69.
 XX
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX
 XX Claim 88; Page 78; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an inozyme of the invention
 XX
 SQ Sequence 17 BP; 3 A; 11 C; 1 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred No. 5.3e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1254 CATCCCCAACCC 1267

Db 4 CCUCCCCAACCC 17

RESULT 514

ABK02630/c
 ID ABK02630 standard; RNA; 17 BP.

XX AC ABK02630;

XX DT 12-MAR-2002 (first entry)

XX DE Human NOGO Amberzyme #302.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neuroprotective; antiparkinsonian; neuroprotective;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hampered ribozyme;
 KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX Homo sapiens.

OS Synthetic.

XX PN WO200159103-A2.

XX PD 16-AUG-2001.

XX PF 09-FEB-2001; 2001WO-US004273.

XX PR 11-FEB-2000; 2000US-0181797P.

XX PR 28-FEB-2000; 2000US-0185516P.

XX PR 06-MAR-2000; 2000US-0187128P.

XX XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX Blatt L, Mcswiggen J, Chowrira BM;

XX WPI; 2001-607195/69.

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.

XX Claim 88; Page 137; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,

CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an amberzyme molecule of the invention
 XX
 SQ Sequence 17 BP; 5 A; 1 C; 8 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1079 CCACTCCAGGCTTC 1092
 Db |||||
 15 CCACTCCAGGCTTC 2
 RESULT 515
 ID ABK02631/C
 AC ABK02631; standard; RNA; 17 BP.
 XX
 XX
 XX 12-MAR-2002 (first entry)
 DE Human NOGO Amberzyme #303.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WC200159103-A2.
 XX
 XX 16-AUG-2001.
 XX
 XX 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX
 XX Blatt L, Mcswiggen J, Chowrira BM;
 XX WPI; 2001-607195/69.
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 constructs, which down regulate expression of a CD20 gene or neurite

PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX Claim 88; Page 137; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an amberzyme molecule of the invention
 XX
 SQ Sequence 17 BP; 4 A; 1 C; 8 G; 0 T; 4 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1079 CCACTCCAGGCTTC 1092
 Db |||||
 14 CCACTCCAGGCTTC 1
 RESULT 516
 ID ABK00750
 XX ABK00750 standard; RNA; 17 BP.
 AC ABK00750;
 XX
 XX 12-MAR-2002 (first entry)
 XX
 DE Human NOGO Inozyme #20.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 OS Homo sapiens.
 OS Synthetic.

XX PN WO200159103-A2.
XX PD 16-AUG-2001.
XX PF 09-FEB-2001; 2001WO-US004273.
XX PR 11-FEB-2000; 2000US-0181797P.
XX PR 28-FEB-2000; 2000US-0185516P.
XX PR 06-MAR-2000; 2000US-0187128P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (CHOW/) CHOWRIRA B M.
XX PI Blatt L, Mcswiggen J, Chowrira BM;
XX DR WPI; 2001-607195/69.
XX PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX PS Claim 88; Page 78; 200pp; English.
XX CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NIGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targeting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopenia, and inflammatory arthropathy. The NIGO-
CC targeting nucleic acid is used to cleave RNA of the NIGO gene in the
CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NIGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NIGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NIGO-targeting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NIGO expression. The present
CC sequence is an inozyme of the invention.
XX SQ Sequence 17 BP; 3 A; 12 C; 0 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 5.3e+02;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1254 CATCCCAACCC 1267
Db 2 CCUCCCAACCC 15
RESULT 517
ID ABK01399/c
ID ABK01399 standard; RNA; 17 BP.

XX AC ABK01399;
XX DT 12-MAR-2002 (first entry)
XX DE Human NIGO Inozyme #669.
XX KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NIGO; hammerhead ribozyme;
KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200159103-A2.
XX PD 16-AUG-2001.
XX PF 09-FEB-2001; 2001WO-US004273.
XX PR 11-FEB-2000; 2000US-0181797P.
XX PR 28-FEB-2000; 2000US-0185516P.
XX PR 06-MAR-2000; 2000US-0187128P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (CHOW/) CHOWRIRA B M.
XX PI Blatt L, Mcswiggen J, Chowrira BM;
XX DR WPI; 2001-607195/69.
XX PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX PS Claim 88; Page 88; 200pp; English.
XX CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NIGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targeting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopenia, and inflammatory arthropathy. The NIGO-
CC targeting nucleic acid is used to cleave RNA of the NIGO gene in the
CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NIGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NIGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NIGO-targeting nucleic acid may be used to

CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an inozyme of the invention
 XX
 SQ Sequence 17 BP; 6 A; 1 C; 7 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1079 CCACCTCCAGGCTTC 1092
 DB 16 CCACCTCCAGTCTTC 3
 RESULT 518
 ABK02089
 ID ABK02089 standard; RNA; 17 BP.
 XX
 AC ABK02089;
 DT 12-MAR-2002 (first entry)
 XX
 DE Human NOGO DNazyme #1.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberszyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWIRRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowirra BM;
 XX WPI; 2001-607195/69.
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX
 PS Claim 88; Page 112; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down

CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with an NIN motif) pr
 CC an amberszyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is a DNazyme molecule of the invention
 XX
 SQ Sequence 17 BP; 4 A; 12 C; 0 G; 0 T; 1 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred. No. 5.3e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1254 CATCCCCAACCCCC 1267
 DB 1 CCUCCCCAACCCCC 14
 RESULT 519
 ABK00749
 ID ABK00749 standard; RNA; 17 BP.
 XX
 AC ABK00749;
 DT 12-MAR-2002 (first entry)
 XX
 DE Human NOGO Inozyme #19.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNazyme; inozyme; G-cleaver; amberszyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWIRRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowirra BM;
 XX WPI; 2001-607195/69.
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX
 PS Claim 88; Page 112; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down

PT Predicting the potential of an oligonucleotide to hybridize to a target
 PT nucleotide sequence, useful for evaluating oligonucleotide probe
 PT sequences, by identifying a oligonucleotides based on the evaluation of
 PT parameters.

XX Example 1; Col 45-46; 342pp; English.

XX The present invention describes a method for predicting the potential of
 CC an oligonucleotide to hybridize to a (complementary) target nucleotide
 CC sequence, involving identifying a subset of oligonucleotides within the
 CC predetermined number of unique oligonucleotides based on the evaluation
 CC of the parameter. Oligonucleotides in the subset are identified that are
 CC clustered along a region of the nucleotide sequence that is hybridisable
 CC to the target nucleotide sequence. This is useful for evaluating
 CC oligonucleotide probe sequences. The present sequence is an
 CC oligonucleotide described in the exemplification of the invention

XX Sequence 17 BP; 3 A; 7 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCACCTTCACCT 1138

Db 4 TTCACATTCACCT 17

RESULT 522

AAH80078
 ID AAH80078 standard; cDNA; 17 BP.

AC AAH80078;

DT 19-SEP-2001 (first entry)

DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 42.

KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;
 KW disease diagnosis; ss.

OS Oryctolagus cuniculus.

XX US6251588-B1.

XX 26-JUN-2001.

XX 10-FEB-1998; 98US-00021701.

XX 10-FEB-1998; 98US-00021701.

XX (AGIL-) AGILENT TECHNOLOGIES INC.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2001-424456/45.

XX Predicting the potential of an oligonucleotide to hybridize to a target
 PT nucleotide sequence, useful for evaluating oligonucleotide probe
 PT sequences, by identifying a oligonucleotides based on the evaluation of
 PT parameters.

XX Example 1; Col 45-46; 342pp; English.

XX The present invention describes a method for predicting the potential of
 CC an oligonucleotide to hybridize to a (complementary) target nucleotide
 CC sequence, involving identifying a subset of oligonucleotides within the
 CC predetermined number of unique oligonucleotides based on the evaluation
 CC of the parameter. Oligonucleotides in the subset are identified that are
 CC clustered along a region of the nucleotide sequence that is hybridisable
 CC to the target nucleotide sequence. This is useful for evaluating
 CC oligonucleotide probe sequences. The present sequence is an
 CC oligonucleotide described in the exemplification of the invention

XX
 SQ Sequence 17 BP; 3 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCACCTTCACCT 1138

Db 2 TTCACATTCACCT 15

RESULT 523

AAH80079

ID AAH80079 standard; cDNA; 17 BP.

XX AAH80079;

XX 19-SEP-2001 (first entry)

DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 43.

KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;
 KW disease diagnosis; ss.

OS Oryctolagus cuniculus.

XX US6251588-B1.

XX 26-JUN-2001.

XX 10-FEB-1998; 98US-00021701.

XX 10-FEB-1998; 98US-00021701.

XX (AGIL-) AGILENT TECHNOLOGIES INC.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2001-424456/45.

XX Predicting the potential of an oligonucleotide to hybridize to a target
 PT nucleotide sequence, useful for evaluating oligonucleotide probe
 PT sequences, by identifying a oligonucleotides based on the evaluation of
 PT parameters.

XX Example 1; Col 45-46; 342pp; English.

XX The present invention describes a method for predicting the potential of
 CC an oligonucleotide to hybridize to a (complementary) target nucleotide
 CC sequence, involving identifying a subset of oligonucleotides within the
 CC predetermined number of unique oligonucleotides based on the evaluation
 CC of the parameter. Oligonucleotides in the subset are identified that are
 CC clustered along a region of the nucleotide sequence that is hybridisable
 CC to the target nucleotide sequence. This is useful for evaluating
 CC oligonucleotide probe sequences. The present sequence is an
 CC oligonucleotide described in the exemplification of the invention

XX Sequence 17 BP; 3 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCACCTTCACCT 1138

Db 1 TTCACATTCACCT 14

RESULT 524

AAH80077

ID AAH80077 standard; cDNA; 17 BP.

XX

AC AAF80077;
 XX
 DT 19-SEP-2001 (first entry)
 XX
 DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 41.
 XX
 DE Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;
 KW disease diagnosis; ss.
 XX
 OS Oryctolagus cuniculus.
 XX
 PN US6251588-B1.
 XX
 PD 26-JUN-2001.
 XX
 PF 10-FEB-1998; 98US-00021701.
 XX
 PR 10-FEB-1998; 98US-00021701.
 XX
 PA (AGIL-) AGILENT TECHNOLOGIES INC.
 XX
 PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;
 XX
 XX WPI; 2001-424456/45.
 DR
 XX Predicting the potential of an oligonucleotide to hybridize to a target
 PT nucleotide sequence, useful for evaluating oligonucleotide probe
 PT sequences, by identifying a oligonucleotides based on the evaluation of
 PT parameters.
 XX
 XX Example 1; Col 45-46; 342pp; English.
 PS
 CC The present invention describes a method for predicting the potential of
 CC an oligonucleotide to hybridize to a (complementary) target nucleotide
 CC sequence, involving identifying a subset of oligonucleotides within the
 CC predetermined number of unique oligonucleotides based on the evaluation
 CC of the parameter. Oligonucleotides in the subset are identified that are
 CC clustered along a region of the nucleotide sequence that is hybridisable
 CC to the target nucleotide sequence. This is useful for evaluating
 CC oligonucleotide probe sequences. The present sequence is an
 CC oligonucleotide described in the exemplification of the invention
 XX
 XX Sequence 17 BP; 3 A; 7 C; 0 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1125 TTCACCTTCACCT 1138
 DB 3 TTCACATTCACCT 16
 RESULT 525
 ABN08365/C
 ID ABN08365 standard; DNA; 17 BP.
 XX
 AC ABN08365;
 XX
 XX 29-MAY-2002 (first entry)
 DT
 XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8357.
 DE
 XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX

PF 25-MAY-2001; 2001WO-US016981.
 XX
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 XX (AEOM-) AEOMICA INC.
 PA
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 PI WPI; 2002-179446/23.
 XX
 DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 XX Disclosure; SEQ ID NO 8357; 214pp; English.
 PS
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1137 CTCACGCTCCACCT 1150
 DB 15 CTCACGCTCCTCCT 2
 RESULT 526
 ABN08366/C
 ID ABN08366 standard; DNA; 17 BP.
 XX
 AC ABN08366;
 XX
 XX 29-MAY-2002 (first entry)
 DT
 XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8358.
 DE

XX Human; genome-derived myosin-like protein 1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX Homo sapiens.
 OS
 XX WO200192524-A2.
 PN 06-DEC-2001.
 XX
 XX 25-MAY-2001; 2001WO-US016981.
 XX
 XX 26-MAY-2000; 2000US-0207456P.
 XX 21-SEP-2000; 2000US-0234687P.
 XX 27-SEP-2000; 2000US-0236359P.
 XX 04-OCT-2000; 2000GB-00024263.
 XX 30-JAN-2001; 2001WO-US000661.
 XX 30-JAN-2001; 2001WO-US000662.
 XX 30-JAN-2001; 2001WO-US000663.
 XX 30-JAN-2001; 2001WO-US000664.
 XX 30-JAN-2001; 2001WO-US000665.
 XX 30-JAN-2001; 2001WO-US000666.
 XX 30-JAN-2001; 2001WO-US000667.
 XX 30-JAN-2001; 2001WO-US000668.
 XX 30-JAN-2001; 2001WO-US000669.
 XX 30-JAN-2001; 2001WO-US000670.
 XX 05-FEB-2001; 2001US-0266860P.
 XX (AEOM-) AEOMICA INC.
 PA
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 PI WPI; 2002-179446/23.
 XX
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 PT
 XX Disclosure; SEQ ID NO 8358; 214pp; English.
 XX
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterize and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1 in particular heart
 CC skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 XX Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1137 CTCACGTCACCT 1150
 |||||
 Db 14 CTCACGTCCTCT 1

RESULT 527
 ABN08363/c
 ID ABN08363 standard; DNA; 17 BP.
 XX
 XX AC ABN08363;
 XX
 XX DT 29-MAY-2002 (first entry)
 XX
 XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8355.
 XX
 XX KW Human; genome-derived myosin-like protein 1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 XX OS Homo sapiens.
 XX
 XX PN WO200192524-A2.
 XX
 XX PD 06-DEC-2001.
 XX
 XX 25-MAY-2001; 2001WO-US016981.
 XX
 XX 26-MAY-2000; 2000US-0207456P.
 XX 21-SEP-2000; 2000US-0234687P.
 XX 27-SEP-2000; 2000US-0236359P.
 XX 04-OCT-2000; 2000GB-00024263.
 XX 30-JAN-2001; 2001WO-US000661.
 XX 30-JAN-2001; 2001WO-US000662.
 XX 30-JAN-2001; 2001WO-US000663.
 XX 30-JAN-2001; 2001WO-US000664.
 XX 30-JAN-2001; 2001WO-US000665.
 XX 30-JAN-2001; 2001WO-US000666.
 XX 30-JAN-2001; 2001WO-US000667.
 XX 30-JAN-2001; 2001WO-US000668.
 XX 30-JAN-2001; 2001WO-US000669.
 XX 30-JAN-2001; 2001WO-US000670.
 XX 05-FEB-2001; 2001US-0266860P.
 XX (AEOM-) AEOMICA INC.
 PA
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 PI WPI; 2002-179446/23.
 XX
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 PT
 XX Disclosure; SEQ ID NO 8358; 214pp; English.
 XX
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterize and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1 in particular heart
 CC skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 XX Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
 SQ

CC at ftp.wipo.int/pub/published_pct_sequence
 XX Sequence 17 BP; 5 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
 SQ Sequence 17 BP; 5 A; 2 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1137 CTCACGCTCCACCT 1150
 |||||
 17 CTCACGCTCCCTCT 4

Db 17 CTCACGCTCCCTCT 4

RESULT 528
 ABN08364/C
 ID ABN08364 standard; DNA; 17 BP.
 XX AC ABN08364;
 XX 29-MAY-2002 (first entry)
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8356.
 XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX OS Homo sapiens.
 XX PN WO200192524-A2.
 XX PD 06-DEC-2001.
 XX PF 25-MAY-2001; 2001WO-US016981.
 XX PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.
 XX PA (AEOM-) ABOMICA INC.
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 XX or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 PT Disclosure; SEQ ID NO 8356; 214pp; English.
 XX PS The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration

CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 6 A; 2 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1137 CTCACGCTCCACCT 1150
 |||||
 16 CTCACGCTCCCTCT 3

Db 16 CTCACGCTCCCTCT 3

RESULT 529
 ABN00983
 ID ABN00983 standard; DNA; 17 BP.
 XX AC ABN00983;
 XX 29-MAY-2002 (first entry)
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:975.
 XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX OS Homo sapiens.
 XX PN WO200192524-A2.
 XX PD 06-DEC-2001.
 XX PF 25-MAY-2001; 2001WO-US016981.
 XX PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.
 XX PA (AEOM-) ABOMICA INC.
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 XX or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 PT Disclosure; SEQ ID NO 975; 214pp; English.
 XX PS The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration

XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published/pct_sequence
XX
SQ Sequence 17 BP; 4 A; 8 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1057 GCCCAACCCCAAG 1070
Db 1 GCCCAACCCCAAG 14
|||||
RESULT 530
ABV80011/c
ID ABV80011 standard; DNA; 17 BP.
XX
AC ABV80011;
XX
DT 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 1257.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX

PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
XX Example 2; Page 228; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 727 TGCAGGAGAAACA 740
Db 14 TGCAGGTGAACA 1
|||||
RESULT 531
ABV83098/c
ID ABV83098 standard; DNA; 17 BP.
XX
AC ABV83098;
XX
DT 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 4344.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX

```

DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
PS Example 2; Page 633; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 914 TTGGTCCTTGCCCTT 927
Db 14 TTGGTCCTTGACTT 1
RESULT 532
ABV83097/C
ID ABV83097 standard; DNA; 17 BP.
XX
AC ABV83097;
XX
ET 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 4343.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
XX
PR 30-JAN-2001; 2001WO-US000664.
XX
PR 30-JAN-2001; 2001WO-US000665.
XX
PR 30-JAN-2001; 2001WO-US000666.
XX
PR 30-JAN-2001; 2001WO-US000667.
XX
PR 23-MAY-2001; 2001US-00864761.
XX
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEONICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
PS Example 2; Page 633; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 914 TTGGTCCTTGCCCTT 927
Db 15 TTGGTCCTTGACTT 2
RESULT 533
ABV80010/C
ID ABV80010 standard; DNA; 17 BP.
XX
AC ABV80010;
XX
ET 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 1256.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
XX
PR 30-JAN-2001; 2001WO-US000664.
XX
PR 30-JAN-2001; 2001WO-US000665.
XX
PR 30-JAN-2001; 2001WO-US000666.
XX
PR 30-JAN-2001; 2001WO-US000667.
XX
PR 23-MAY-2001; 2001US-00864761.
XX
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEONICA INC.
XX

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PA (AEOM-) AEOMICA INC.
XX
XX
PI Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTPL.
XX
XX Example 2; Page 228; 718pp; English.
XX
XX The present invention relates to human testis expressed patched like
XX protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
XX has two isoforms, with a few single base pair differences between the
XX two. One of the single base pair changes introduces a premature stop
XX codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX shares an overall structure organisation with the patched protein. The
XX shared structural features strongly imply that HTPL plays a role similar
XX to that of Patched, and is a potential tumour suppressor. HTPL is
XX important in regulating male germ cell development, and the HTPL gene was
XX mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX useful for diagnosing a disorder caused by mutation in HTPL, and in
XX therapy and manufacture of a medicament for treatment or prevention of
XX such disorder associated with decreased expression or activity of human
XX HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, and
XX skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX clinically useful diagnostic markers and potential therapeutic agents for
XX male infertility and cancer. The present oligonucleotide was used in an
XX example from the invention
XX
XX Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 92.9%; Pred. No. 5.3e+02;
XX Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 727 TGCCAGGGAACA 740
XX 15 TGCCAGGTGAACA 2
XX
XX RESULT 534
XX ABK18188
XX ID ABK18188 standard; RNA; 17 BP.
XX AC ABK18188;
XX XX
XX 09-APR-2002 (first entry)
XX
XX Human ERG hammerhead ribozyme target sequence, Seq ID No 835.
XX
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;
XX amberzyme.
XX
XX Homo sapiens.
XX
XX WO200188124-A2.
XX
XX 22-NOV-2001.
XX
XX 16-MAY-2001; 2001WO-US015866.
XX
XX 16-MAY-2000; 2000US-00572021.
XX
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (GLAX ) GLAXO GROUP LTD.
XX
XX Jarvis T, Von Carlowitz I, Meswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX Claim 4; Page 74; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, Sturge
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX
XX Sequence 17 BP; 2 A; 11 C; 3 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 85.7%; Pred. No. 5.3e+02;
XX Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1136 CCTCCAGCTCCACC 1149
XX 4 CCUCCAGCCCCACC 17
XX
XX RESULT 535
XX ABK18189
XX ID ABK18189 standard; RNA; 17 BP.
XX AC ABK18189;
XX XX
XX 09-APR-2002 (first entry)
XX
XX Human ERG hammerhead ribozyme target sequence, Seq ID No 836.
XX
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;
XX amberzyme.
XX
XX Homo sapiens.
XX
XX WO200188124-A2.
XX
XX 22-NOV-2001.
XX
XX 16-MAY-2001; 2001WO-US015866.
XX
XX 16-MAY-2000; 2000US-00572021.
XX
XX

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XX PD 22-NOV-2001.
 XX KW 16-MAY-2001; 2001WO-US015866.
 XX PF 16-MAY-2000; 2000US-00572021.
 XX PR (RIBO-) RIBOZYME PHARM INC.
 XX PA (GLAX) GLAXO GROUP LTD.
 XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
 XX WI; 2002-082995/11.
 XX Novel polynucleotide which down regulates expression of Ets-related gene,
 XX useful for treating cancer, diabetic retinopathy, macular degeneration,
 XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
 XX PS Claim 4; Page 74; 149pp; English.
 XX The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX Sequence 17 BP; 2 A; 13 C; 1 G; 0 T; 1 U; 0 Other;
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred. No. 5.3e-02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1136 CCTCAGCTCCACC 1149
 DB 1 CCUCCAGCCACC 14
 ||:|||||
 RESULT 536
 ABK18365/c
 ID ABK18365 standard; RNA; 17 BP.
 XX AC ABK18365;
 XX 09-APR-2002 (first entry)
 XX Human ERG hammerhead ribozyme target sequence, Seq ID No 1012.
 XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
 KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;

KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
 XX amberyzyme.
 XX Homo sapiens.
 XX WO200188124-A2.
 XX 22-NOV-2001.
 XX 16-MAY-2001; 2001WO-US015866.
 XX 16-MAY-2000; 2000US-00572021.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX (GLAX) GLAXO GROUP LTD.
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
 XX WI; 2002-082995/11.
 XX Novel polynucleotide which down regulates expression of Ets-related gene,
 XX useful for treating cancer, diabetic retinopathy, macular degeneration,
 XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
 XX Claim 4; Page 77; 149pp; English.
 XX The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX Sequence 17 BP; 2 A; 3 C; 6 G; 0 T; 6 U; 0 Other;
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e-02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 752 GCACCTGCCATGCA 765
 DB 14 GCACATGCCATGCA 1
 ||:|||||
 RESULT 537
 ABK18820
 ID ABK18820 standard; RNA; 17 BP.
 XX AC ABK18820;
 XX 09-APR-2002 (first entry)
 XX Human ERG DNAzyme target sequence Seq ID No 1467.

XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
 KW vulvular; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 KW angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;
 KW amberzyme.
 XX Homo sapiens.
 XX WO2001:88124-A2.
 XX 22-NOV-2001.
 XX 16-MAY-2001; 2001WO-US015866.
 XX 16-MAY-2000; 2000US-00572021.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX (GLAX) GLAXO GROUP LTD.
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
 XX WPI; 2002-082995/11.
 XX Novel polynucleotide which down regulates expression of Ets-related gene,
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
 XX Claim 4; Page 92; 149pp; English.
 XX The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberosus sclerosus, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK7354-ABK2719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX
 XX Sequence 17 BP; 2 A; 12 C; 2 G; 0 T; 1 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred. No. 5.3e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1136 CCTCCAGCTCCACC 1149
 |||||
 3 CCUCCAGCCACC 16
 Db
 RESULT 538
 ABZ81920/c

ID ABZ81920 standard; DNA; 17 BP.
 XX AC ABZ81920;
 XX 11-JUN-2003 (first entry)
 XX SP011 gene forward PCR primer.
 DE SP011; meiosis; recombination; reverse breeding; haploid; hybrid seed;
 KW cytoplasmic male sterility; plant; PCR; primer; ss.
 XX Arabidopsis thaliana.
 XX OS WO2003017753-A2.
 XX PN 06-MAR-2003.
 XX PD 23-AUG-2002; 2002WO-EP009526.
 XX PF 23-AUG-2001; 2001EP-00203193.
 XX PR 12-FEB-2002; 2002EP-00075582.
 XX (RIJK-) RIJK ZWAAN ZAATTEELT & ZAADHANDEL BV.
 XX FA Dirks RHG, Van Dun CMP, Reinink K;
 XX FI WPI; 2003-278599/27.
 XX DR Efficiently producing homozygous organisms from a heterozygous starting
 XX organism, e.g. animal or plant, useful for plant breeding, comprises
 PT creating homozygous organisms from the haploid cells produced by the
 PT starting organism.
 XX Example 3; Page 59; 100pp; English.
 XX The present sequence is a forward primer for the SP011 gene, which is
 CC involved in the formation of double-strand breaks during recombination.
 CC It is used with the reverse primer given in ABZ81921. The primers
 CC correspond to a position of the Arabidopsis thaliana SP011-1 genomic DNA
 CC which encodes a stretch of amino acids which is highly conserved between
 CC known SP011 orthologues of different species. They were used to amplify
 CC SP011 gene fragments from Brassica oleracea and Brassica carinata (see
 CC also ABZ81913-14). The invention relates to a method of efficiently
 CC producing homozygous organisms (plants, fungi or animals) from a
 CC heterozygous starting organism. This involves producing haploid cells
 CC from the heterozygous starting organism and creating homozygous organisms
 CC from the haploid cells. Recombination is prevented or suppressed during
 CC haploid production such that the normal variation that arises in every
 CC natural cross can be limited or avoided and the number of haploid cells
 CC having different sets of chromosomes is reduced. Recombination is
 CC prevented or suppressed by interfering with one or more target genes
 CC involved in recombination, such as the SP011 gene. This is achieved using
 CC antisense RNA, RNA interference (RNAi) molecules, virus induced gene
 CC silencing, RNA oligonucleotides or DNA oligonucleotides. The method
 CC relates in particular to plant breeding to produce parental lines for the
 CC production of hybrid offspring, and its use for the transfer of
 CC cytoplasmic male sterility and for the production of F1 hybrid seed is
 CC claimed. The present primer pair can be used to select SP011 genes for
 CC use in the method
 XX
 XX Sequence 17 BP; 3 A; 1 C; 9 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1252 CCCATCCCAACCC 1265
 |||||
 17 CCCATCACCACCC 4
 Db
 RESULT 539
 ABT36385

ID AC ABT36385 standard; DNA; 17 BP.
 XX AC
 XX ABT36385;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 2022.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 XX Homo sapiens.
 OS
 XX WO2003025175-A2.
 PN
 XX 27-MAR-2003.
 PD
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-313353/30.
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 PT
 XX Disclosure; Page 269; 720pp; French.
 PS
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 911 TCTTTGGTCTTGC 924
 |||||
 Db 3 TCTTTGGTCTTGC 16
 RESULT 540
 ABT39882
 ID ABT39882 standard; DNA; 17 BP.
 XX

AC ABT39882;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 5519.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 XX Homo sapiens.
 OS
 XX WO2003025175-A2.
 PN
 XX 27-MAR-2003.
 PD
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-313353/30.
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 PT
 XX Disclosure; Page 679; 720pp; French.
 PS
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 4 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 796 TCTCTAGTAAGTCTG 809
 |||||
 Db 3 TCTCTAGTAAGTCTG 16
 RESULT 541
 ABT37535
 ID ABT37535 standard; DNA; 17 BP.
 XX
 XX ABT37535;
 XX

```
DT 12-JUN-2003 (first entry)
XX Tumour suppression related human fukutin oligo SEQ ID No 3172.
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX Homo sapiens.
OS
XX WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX Disclosure; Page 404; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1185 CCGCAGAGAGGTGG 1198
DB 4 CCCCAGAGAGGTGG 17
RESULT 542
ABT38343
ID ABT38343 standard; DNA; 17 BP.
XX
XX AC ABT38343;
XX
XX DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 3172.
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX Homo sapiens.
OS
XX WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX Disclosure; Page 404; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1185 CCGCAGAGAGGTGG 1198
DB 4 CCCCAGAGAGGTGG 17
RESULT 542
ABT38343
ID ABT38343 standard; DNA; 17 BP.
XX
XX AC ABT38343;
XX
XX DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 3980.
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX Homo sapiens.
OS
XX WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX Disclosure; Page 499; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 7 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1010 CACCTGAAAAGAG 1023
DB 4 CACCTGAAAAGAG 17
RESULT 543
ABT38750/c
ID ABT38750 standard; DNA; 17 BP.
XX
XX AC ABT38750;
XX
XX DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 4387.
DE
```

KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 OS Homo sapiens.
 PN WO2003025175-A2.
 XX 27-MAR-2003.
 XX 17-SEP-2002; 2002WO-IB004208.
 XX 17-SEP-2001; 2001FR-00011978.
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX Telerman A, Anson R, Tuijnder M;
 XX WPI; 2003-313353/30.
 XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX Disclosure; Page 546; 720pp; French.
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterized by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX Sequence 17 BP; 4 A; 1 C; 9 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1258 CCCAACCCCTTCA 1271
 DB 16 CCCAACCCCTTCA 3
 RESULT 544
 ACA06841/c
 ID ACA06841 standard; RNA; 17 BP.
 XX ACA06841;
 XX 03-JUN-2003 (first entry)
 XX NFKB sub-unit modulating inozyme substrate #660.
 DE Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;

KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
 XX Homo sapiens.
 OS US2002177568-A1.
 XX 28-NOV-2002.
 XX 23-MAY-2001; 2001US-00864785.
 XX 07-DEC-1992; 92US-00987132.
 PR 18-MAY-1994; 94US-00245466.
 PR 15-AUG-1994; 94US-00281932.
 PR 23-DEC-1996; 96US-00777916.
 XX (STIN/) STINCHCOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 XX Stinchcomb DT, Mcswiggen J, Draper KG;
 WPI; 2003-340953/32.
 XX Novel enzymatic nucleic acid molecules which down regulates expression of
 PT a sequence encoding a subunit of nuclear factor kappa B useful for
 PT treating cancer, inflammatory disorders and autoimmune diseases.
 XX Claim 3; Page 36; 72pp; English.
 XX The invention describes an enzymatic nucleic acid molecule (1) which down
 CC regulates expression of a sequence encoding a subunit of nuclear factor
 CC kappa B (NFKB), where (1) is an inozyme, zinzyme, G-cleaver or amberzyme
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat
 CC cancer and is useful for down-regulating REL-A activity in a cell, for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (1) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents the substrate of a novel enzymatic
 CC nucleic acid molecule
 XX Sequence 17 BP; 5 A; 5 C; 5 G; 0 T; 2 U; 0 Other;
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 887 CAGTGTCTGTGGCC 900
 DB 15 CAGTGTCTGTGGAC 2

RESULT 545
 ID ACA07870/c
 XX ACA07870 standard; RNA; 17 BP.
 AC ACA07870;
 XX
 XX
 DT 03-JUN-2003 (first entry)
 XX
 DE NFkB sub-unit modulating zinzyme substrate #269.
 XX
 KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
 KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; human;
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; sepsis;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2002177568-A1.
 PN
 XX
 XX 28-NOV-2002.
 PD
 XX
 XX 23-MAY-2001; 2001US-00864785.
 XX
 XX 07-DEC-1992; 92US-00987132.
 PR
 XX 18-MAY-1994; 94US-00245466.
 PR
 XX 15-AUG-1994; 94US-00291932.
 PR
 XX 23-DEC-1996; 96US-00777916.
 XX
 PA (STIN/) STINCHCOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 XX
 XX Stinchcomb DT, Mcswiggen J, Draper KG;
 XX
 XX WPI; 2003-340953/32.
 XX
 XX Novel enzymatic nucleic acid molecules which down regulates expression of
 PT a sequence encoding a subunit of nuclear factor kappa B useful for
 PT treating cancer, inflammatory disorders and autoimmune diseases.
 XX
 XX Claim 3; Page 41; 72pp; English.
 XX
 CC The invention describes an enzymatic nucleic acid molecule (I) which down
 CC regulates expression of a sequence encoding a subunit of nuclear factor
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberyne
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat
 CC cancer and is useful for down-regulating REL-A activity in a cell for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury

CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents the substrate of a novel enzymatic
 CC nucleic acid molecule
 XX
 SQ Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 887 CAGTGTCTTGTGCC 900
 Db 14 CAGTGTCTTGTGCAC 1
 RESULT 546
 ID ACA08321/c
 XX ACA08321 standard; DNA; 17 BP.
 AC ACA08321;
 XX
 DT 03-JUN-2003 (first entry)
 XX
 DE Necrosis factor kappa B (NFkB) sub-unit modulating DNazyme #90.
 XX
 KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
 KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; lung cancer;
 KW prostate cancer; colorectal cancer; brain cancer; oesophageal cancer;
 KW stomach cancer; bladder cancer; pancreatic cancer; cervical cancer;
 KW head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma;
 KW multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy;
 KW paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide;
 KW doxorubin; fluorouracil carboplatin; edatrexate; gemcitabine;
 KW radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
 XX
 OS Synthetic.
 XX
 XX US2002177568-A1.
 PN
 XX
 XX 28-NOV-2002.
 PD
 XX
 XX 23-MAY-2001; 2001US-00864785.
 XX
 XX 07-DEC-1992; 92US-00987132.
 PR
 XX 18-MAY-1994; 94US-00245466.
 PR
 XX 15-AUG-1994; 94US-00291932.
 PR
 XX 23-DEC-1996; 96US-00777916.
 XX
 PA (STIN/) STINCHCOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 XX
 XX Stinchcomb DT, Mcswiggen J, Draper KG;
 XX
 XX WPI; 2003-340953/32.
 XX
 XX Novel enzymatic nucleic acid molecules which down regulates expression of
 PT a sequence encoding a subunit of nuclear factor kappa B useful for
 PT treating cancer, inflammatory disorders and autoimmune diseases.
 XX
 XX Claim 3; Page 48; 72pp; English.
 XX
 CC The invention describes an enzymatic nucleic acid molecule (I) which down
 CC regulates expression of a sequence encoding a subunit of nuclear factor
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberyne
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat
 CC cancer and is useful for down-regulating REL-A activity in a cell for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury

CC (1) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents an enzymatic nucleic acid used to
 CC modulate the function of a necrosis factor kappa B sub-unit
 XX Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 887 CAGTGTCTGTGGCC 900

DB 17 CAGTGTCTGTGCAC 4

RESULT 547

ACA09069/c
 ID ACA09069 standard; RNA; 17 BP.

ACA09069;

03-JUN-2003 (first entry)

NFKB sub-unit modulating amberzyme substrate #232.

Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
 G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
 lung cancer; prostate cancer; colorectal cancer; brain cancer;
 oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
 gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 transplant/graft rejection; reperfusion injury; glomerulonephritis;
 allergic airway inflammation; inflammatory bowel disease; infection; ss.

Homo sapiens.

US2002177568-A1.

28-NOV-2002.

23-MAY-2001; 2001US-00864785.

07-DEC-1992; 92US-00987132.

18-MAY-1994; 94US-00245466.

15-AUG-1994; 94US-00291932.

23-DEC-1996; 96US-00777916.

(STIN/) STINCHOMB D T.

(MCSW/) MCSWIGGEN J.

(DRAP/) DRAPER K G.

Stinchcomb DT, Meswiggen J, Draper KG;

WPI; 2003-340953/32.

Novel enzymatic nucleic acid molecules which down regulates expression of
 a sequence encoding a subunit of nuclear factor kappa B useful for
 treating cancer, inflammatory disorders and autoimmune diseases.

Claim 3; Page 55; 72pp; English.

The invention describes an enzymatic nucleic acid molecule (1) which down
 regulates expression of a sequence encoding a subunit of nuclear factor
 kappa B (NFKB), where (1) is an inozyme, zinzyme, G-cleaver or amberzyme
 configuration. The enzymatic nucleic acid molecule is adapted to treat
 cancer and is useful for down-regulating REL-A activity in a cell, for
 treating a patient having a condition associated with the level of REL-A.
 (1) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 antisense nucleic acid molecules are useful for treating breast, lung,
 prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents the substrate of a novel enzymatic
 CC nucleic acid molecule
 XX Sequence 17 BP; 3 A; 4 C; 8 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCCC 1098

DB 16 CAGGCGTCACCCCC 3

RESULT 548

ACA06257

ID ACA06257 standard; RNA; 17 BP.

ACA06257;

03-JUN-2003 (first entry)

NFKB sub-unit modulating inozyme substrate #76.

Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
 G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
 lung cancer; prostate cancer; colorectal cancer; brain cancer;
 oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
 gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 transplant/graft rejection; reperfusion injury; glomerulonephritis;
 allergic airway inflammation; inflammatory bowel disease; infection; ss.

Homo sapiens.

US2002177568-A1.

28-NOV-2002.

XX PF 23-MAY-2001; 2001US-00864785.
 XX PR 07-DEC-1992; 92US-00987132.
 XX PR 18-MAY-1994; 94US-00245466.
 XX PR 15-AUG-1994; 94US-00291932.
 XX PR 23-DEC-1996; 96US-00777916.
 XX (STIN/) STINCHOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 XX Stinchcomb DT, Mcswiggen J, Draper KG;
 XX WPI; 2003-340953/32.
 XX Novel enzymatic nucleic acid molecules which down regulates expression of
 PT a sequence encoding a subunit of nuclear factor kappa B useful for
 FT treating cancer, inflammatory disorders and autoimmune diseases.
 XX Claim 3; Page 28; 72pp; English.
 XX The invention describes an enzymatic nucleic acid molecule (I) which down
 CC regulates expression of a sequence encoding a subunit of nuclear factor
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat
 CC cancer and is useful for down-regulating REL-A activity in a cell, for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
 CC gencitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents the substrate of a novel enzymatic
 CC nucleic acid molecule
 XX Sequence 17 BP; 3 A; 9 C; 4 G; 0 T; 1 U; 0 Other;
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred. No. 5.3e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1087 GGCTTCACCCCCAC 1100
 DB 1 GGCTTCACCCCCAC 14
 RESULT 549
 ACA08289/c
 ID ACA08289 standard; DNA; 17 BP.
 XX ACA08289;
 XX 03-JUN-2003 (first entry)
 XX Necrosis factor kappa B (NFkB) sub-unit modulating DNazyme #58.
 XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; lung cancer;
 KW prostate cancer; colorectal cancer; brain cancer; oesophageal cancer;
 KW stomach cancer; bladder cancer; pancreatic cancer; cervical cancer;
 KW head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma;

KW multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy;
 KW paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide;
 KW doxorubicin; fluorouracil carboplatin; edatrexate; gemcitabine;
 KW radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 XX allergic airway inflammation; inflammatory bowel disease; infection; ss.
 OS Synthetic.
 XX US2002177568-A1.
 XX 28-NOV-2002.
 XX 23-MAY-2001; 2001US-00864785.
 XX 07-DEC-1992; 92US-00987132.
 XX 18-MAY-1994; 94US-00245466.
 XX 15-AUG-1994; 94US-00291932.
 XX 23-DEC-1996; 96US-00777916.
 XX (STIN/) STINCHOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 XX Stinchcomb DT, Mcswiggen J, Draper KG;
 XX WPI; 2003-340953/32.
 XX Novel enzymatic nucleic acid molecules which down regulates expression of
 PT a sequence encoding a subunit of nuclear factor kappa B useful for
 FT treating cancer, inflammatory disorders and autoimmune diseases.
 XX Claim 3; Page 47; 72pp; English.
 XX The invention describes an enzymatic nucleic acid molecule (I) which down
 CC regulates expression of a sequence encoding a subunit of nuclear factor
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat
 CC cancer and is useful for down-regulating REL-A activity in a cell, for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
 CC gencitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents an enzymatic nucleic acid used to
 CC modulate the function of a necrosis factor kappa B sub-unit
 SQ Sequence 17 BP; 2 A; 5 C; 8 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1085 CAGGCTTCACCCCC 1098
 DB 15 CAGGCTTCACCCCC 2
 RESULT 550

KW	ABZ61864/c
XX	ABZ61864 standard; RNA; 17 BP.
OS	ABZ61864;
AC	ABZ61864;
XX	21-MAR-2003 (first entry)
DT	Human H-Ras DNzyme target #655.
XX	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
DE	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
XX	anti-rheumatic; cancer; AIDS; ss.
XX	Homo sapiens.
OS	WO200297114-A2.
XX	05-DEC-2002.
PD	29-MAY-2002; 2002WO-US016840.
PF	29-MAY-2001; 2001US-0294140P.
XX	06-JUN-2001; 2001US-0296249P.
PR	10-SEP-2001; 2001US-0318471P.
XX	(RIBO-) RIBOZYME PHARM INC.
PA	Mcswiggen J;
PI	WFI; 2003-140484/13.
DR	Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
PT	Claim 58; Page 123; 185pp; English.
PS	The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human ribozymes of the invention
CC	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
SQ	Query Match 0.6%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred.No. 5.3e+02; Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180 GCTCCCCGCGAGAGA 1193 17 GCTCCCCGCGAGAGA 4
DB	RESULT 551 ABZ64930 ID ABZ64930 standard; RNA; 17 BP. XX AC ABZ64930; XX DT 21-MAR-2003 (first entry) XX DE Human HER2 DNzyme substrate #387. XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
XX	anti-rheumatic; cancer; AIDS; ss.
OS	Homo sapiens.
XX	WO200297114-A2.
PN	05-DEC-2002.
PD	29-MAY-2002; 2002WO-US016840.
PF	29-MAY-2001; 2001US-0294140P.
XX	06-JUN-2001; 2001US-0296249P.
PR	10-SEP-2001; 2001US-0318471P.
XX	(RIBO-) RIBOZYME PHARM INC.
PA	Mcswiggen J;
PI	WFI; 2003-140484/13.
DR	Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
PT	Claim 58; Page 123; 185pp; English.
PS	The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human ribozymes of the invention
CC	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
SQ	Query Match 0.6%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred.No. 5.3e+02; Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180 GCTCCCCGCGAGAGA 1193 17 GCTCCCCGCGAGAGA 4
DB	RESULT 551 ABZ64930 ID ABZ64930 standard; RNA; 17 BP. XX AC ABZ64930; XX DT 21-MAR-2003 (first entry) XX DE Human HER2 DNzyme substrate #387. XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
XX	anti-rheumatic; cancer; AIDS; ss.
OS	Homo sapiens.
XX	WO200297114-A2.
PN	05-DEC-2002.
PD	29-MAY-2002; 2002WO-US016840.
PF	29-MAY-2001; 2001US-0294140P.
XX	06-JUN-2001; 2001US-0296249P.
PR	10-SEP-2001; 2001US-0318471P.
XX	(RIBO-) RIBOZYME PHARM INC.
PA	Mcswiggen J;
PI	WFI; 2003-140484/13.
DR	Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
PT	Claim 58; Page 123; 185pp; English.
PS	The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human ribozymes of the invention
CC	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
SQ	Query Match 0.6%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred.No. 5.3e+02; Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180 GCTCCCCGCGAGAGA 1193 17 GCTCCCCGCGAGAGA 4
DB	RESULT 551 ABZ64930 ID ABZ64930 standard; RNA; 17 BP. XX AC ABZ64930; XX DT 21-MAR-2003 (first entry) XX DE Human HER2 DNzyme substrate #387. XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
XX	anti-rheumatic; cancer; AIDS; ss.
OS	Homo sapiens.
XX	WO200297114-A2.
PN	05-DEC-2002.
PD	29-MAY-2002; 2002WO-US016840.
PF	29-MAY-2001; 2001US-0294140P.
XX	06-JUN-2001; 2001US-0296249P.
PR	10-SEP-2001; 2001US-0318471P.
XX	(RIBO-) RIBOZYME PHARM INC.
PA	Mcswiggen J;
PI	WFI; 2003-140484/13.
DR	Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
PT	Claim 58; Page 123; 185pp; English.
PS	The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human ribozymes of the invention
CC	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
SQ	Query Match 0.6%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred.No. 5.3e+02; Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180 GCTCCCCGCGAGAGA 11

KW	ABZ61864/c	anti-rheumatic; cancer; RNA; 17 BP.
XX	ID	ABZ61864 standard; RNA; 17 BP.
OS	XX	
AC	XX	ABZ61864;
XX	XX	
DT	XX	21-MAR-2003 (first entry)
XX	XX	
DE	XX	Human H-Ras DNzyme target #655.
XX	XX	
KW	XX	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW	XX	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW	XX	anti-rheumatic; cancer; AIDS; ss.
XX	XX	
OS	XX	Homo sapiens.
XX	XX	WO200297114-A2.
PN	XX	
PD	XX	05-DEC-2002.
XX	XX	
PF	XX	29-MAY-2002; 2002WO-US016840.
XX	XX	
PR	XX	29-MAY-2001; 2001US-0294140P.
PR	XX	06-JUN-2001; 2001US-0296249P.
PR	XX	10-SEP-2001; 2001US-0318471P.
XX	XX	
PA	XX	(RIBO-) RIBOZYME PHARM INC.
XX	XX	
PI	XX	Mcswiggen J;
XX	XX	
DR	XX	WPI; 2003-140484/13.
XX	XX	
PT	XX	Novel short interfering RNA and enzymatic nucleic acid useful for
PT	XX	treating cancer, modulates the expression of a nucleic acid encoding
PT	XX	HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX	XX	
PS	XX	Claim 4; Page 140; 185pp; English.
XX	XX	
CC	XX	The invention relates to a novel short interfering RNA (siRNA) nucleic
CC	XX	acid molecule or an enzymatic nucleic acid molecule, that modulates
CC	XX	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC	XX	human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC	XX	acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC	XX	rheumatic activity. The nucleic acid molecules are useful for reducing
CC	XX	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC	XX	also useful for treating breast, ovarian, colorectal, lung, prostate,
CC	XX	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC	XX	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC	XX	ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC	XX	ribozymes of the invention
XX	XX	
SQ	XX	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
		Query Match 0.6%; Score 12.4; DB 1; Length 17;
		Best Local Similarity 92.9%; Pred.No. 5.3e+02;
		Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180	GCTCCCGCAGAGA 1193
DB	17	GCTCCCGCAGAGA 4
RESULT 551		
ABZ64930		
ID	ABZ64930 standard; RNA; 17 BP.	
XX	XX	
AC	XX	ABZ64930;
XX	XX	
DT	XX	21-MAR-2003 (first entry)
XX	XX	
DE	XX	Human HER2 DNzyme substrate #387.
XX	XX	
KW	XX	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW	XX	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX	XX	
OS	XX	Homo sapiens.
XX	XX	WO200297114-A2.
PN	XX	
PD	XX	05-DEC-2002.
XX	XX	
PF	XX	29-MAY-2002; 2002WO-US016840.
XX	XX	
PR	XX	29-MAY-2001; 2001US-0294140P.
PR	XX	06-JUN-2001; 2001US-0296249P.
PR	XX	10-SEP-2001; 2001US-0318471P.
XX	XX	
PA	XX	(RIBO-) RIBOZYME PHARM INC.
XX	XX	
PI	XX	Mcswiggen J;
XX	XX	
DR	XX	WPI; 2003-140484/13.
XX	XX	
PT	XX	Novel short interfering RNA and enzymatic nucleic acid useful for
PT	XX	treating cancer, modulates the expression of a nucleic acid encoding
PT	XX	HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX	XX	
PS	XX	Claim 58; Page 123; 185pp; English.
XX	XX	
CC	XX	The invention relates to a novel short interfering RNA (siRNA) nucleic
CC	XX	acid molecule or an enzymatic nucleic acid molecule, that modulates
CC	XX	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC	XX	human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC	XX	acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC	XX	rheumatic activity. The nucleic acid molecules are useful for reducing
CC	XX	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC	XX	also useful for treating breast, ovarian, colorectal, lung, prostate,
CC	XX	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC	XX	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC	XX	ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC	XX	ribozymes of the invention
XX	XX	
SQ	XX	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
		Query Match 0.6%; Score 12.4; DB 1; Length 17;
		Best Local Similarity 92.9%; Pred.No. 5.3e+02;
		Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180	GCTCCCGCAGAGA 1193
DB	17	GCTCCCGCAGAGA 4
RESULT 551		
ABZ64930		
ID	ABZ64930 standard; RNA; 17 BP.	
XX	XX	
AC	XX	ABZ64930;
XX	XX	
DT	XX	21-MAR-2003 (first entry)
XX		

CC also useful for treating breast, ovarian, colorectal, lung, prostate,
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
 CC shown in ABZ5989 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
 CC ABZ66530 - ABZ66595 represent substrate/target sequences for the human
 CC ribozymes of the invention

XX Sequence 17 BP; 3 A; 8 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 85.7%; Pred. No. 5.3e+02;

Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1231 GCGACAGCCCTGCG 1244

DB 3 GCGACAGCCUCC 16

RESULT 555

ACD50661

ID ACD50661 standard; RNA; 17 BP.

XX AC ACD50661;

XX DT 23-SEP-2003 (first entry)

XX DE HBV hammerhead ribozyme substrate sequence #178.

XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

XX KW RNA stability; RNA expression; RNA synthesis; antisense;

XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

XX KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

XX KW HBV reverse transcriptase; Enhancer I region; viral replication;

XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

XX KW virucide; antiinflammatory; substrate; ss.

XX OS Hepatitis B virus.

XX PN WO200281494-A1.

XX PD 17-OCT-2002.

XX PF 26-MAR-2002; 2002WO-US009187.

XX PR 26-MAR-2001; 2001US-00817879.

XX PR 08-JUN-2001; 2001US-00877478.

XX PR 08-JUN-2001; 2001US-0296876P.

XX PR 24-OCT-2001; 2001US-0335059P.

XX PR 05-DEC-2001; 2001US-0337055P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PA (BLAT/) BLATT L.

XX PA (MACE/) MACEJAK D.

XX PA (MCSW/) MCSWIGGEN J.

XX PA (PAVC/) PAVCO P.

XX PA (LEEP/) LEE P.

XX PA (DRAP/) DRAPER K.

XX PA (ROBE/) ROBERTS E.

XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

XX PI Draper K, Roberts E;

XX WPI; 2003-229207/22.

XX Novel compound useful for treating cirrhosis, liver failure,

XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus

XX PT infection.

XX PS Example 1; Page 139; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate

XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV. The compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
 CC disclosed in the present invention

XX Sequence 17 BP; 2 A; 4 C; 1 G; 0 T; 10 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 28.6%; Pred. No. 5.3e+02;

Matches 4; Conservative 9; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTTGGTCT 920

DB 4 AUUUUUUUUGUCU 17

RESULT 556

ACD65750

ID ACD65750 standard; RNA; 17 BP.

XX AC ACD65750;

XX DT 30-SEP-2003 (first entry)

XX DE HCV minus strand DNazyme substrate sequence #2213.

XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

XX KW RNA stability; RNA expression; RNA synthesis; antisense;

XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

XX KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

XX KW HBV reverse transcriptase; Enhancer I region; viral replication;

XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

XX KW virucide; antiinflammatory; substrate; ss.

XX OS Hepatitis C virus.

XX PN WO200281494-A1.

XX PD 17-OCT-2002.

XX PF 26-MAR-2002; 2002WO-US009187.

XX PR 26-MAR-2001; 2001US-00817879.

XX PR 08-JUN-2001; 2001US-00877478.

XX PR 08-JUN-2001; 2001US-0296876P.

XX PR 24-OCT-2001; 2001US-0335059P.

XX PR 05-DEC-2001; 2001US-0337055P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PA (BLAT/) BLATT L.

XX PA (MACE/) MACEJAK D.

XX PA (MCSW/) MCSWIGGEN J.

XX PA (MORR/) MORRISSEY D.

XX PA (PAVC/) PAVCO P.

XX PA (LEEP/) LEE P.

XX PA (DRAP/) DRAPER K.

XX PA (ROBE/) ROBERTS E.

XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

XX PI Draper K, Roberts E;

XX WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 XX Claim 1; Page 314; 387pp; English.
 XX
 XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNzyme or minus strand DNzyme sequences disclosed in the present
 CC invention
 XX
 XX Sequence 17 BP; 5 A; 6 C; 4 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 78.6%; Pred. No. 5.3e+02;
 Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 1200 ACCACCCCTATCAGG 1213
 Db 1 AGCACCCUACAGG 14
 RESULT 557
 ACDS4040
 ID ACD54040 standard; RNA; 17 BP.
 AC ACD54040;
 XX
 XX 24-SEP-2003 (first entry)
 XX
 XX HBV zinzyme substrate sequence #159.
 XX
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 XX Hepatitis B virus.
 XX
 XX WO200281494-A1.
 XX
 XX 17-OCT-2002.
 XX
 XX 26-MAR-2002; 2002WO-US009187.
 XX
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.

PA (BLATT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY J.
 PA (PAVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 XX Example 1; Page 176; 387pp; English.
 XX
 XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or amberzyme sequences
 CC disclosed in the present invention
 XX
 XX Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 78.6%; Pred. No. 5.3e+02;
 Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 1084 CCAGGCTTACCCC 1097
 Db 4 CCAGGGUUCACCCC 17
 RESULT 558
 ACDS5368
 ID ACD55368 standard; RNA; 17 BP.
 AC ACD55368;
 XX
 XX 23-SEP-2003 (first entry)
 XX
 XX HBV amberzyme substrate sequence #26.
 XX
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 XX Hepatitis B virus.
 XX
 XX WO200281494-A1.
 XX

```

PD XX 17-OCT-2002.
XX PF 26-MAR-2002; 2002WO-US009187.
XX PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MACE/) MACEJAK D.
XX (MCSW/) MCSWIGGEN J.
XX (MORR/) MORRISSEY D.
XX (PAVC/) PAVCO P.
XX (LEEP/) LEE P.
XX (DRAP/) DRAPER K.
XX (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Example 1; Page 202; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HBV
XX ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
XX disclosed in the present invention
XX
XX Sequence 17 BP; 7 A; 4 C; 3 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 85.7%; Pred. No. 5.3e+02;
XX Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1297 CCACAGAGCCTAGA 1310
XX ||||| :|||
XX 4 CCACAGAGUCUAGA 17
XX
XX RESULT 559
XX ACDS1586
XX ID ACDS1586 standard; RNA; 17 BP.
XX
XX AC ACDS1586;
XX
XX XX 24-SEP-2003 (first entry)
XX
XX HBV hammerhead ribozyme substrate sequence #644.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;

```

```

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis B virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX 08-JUN-2001; 2001US-00877478.
XX 08-JUN-2001; 2001US-0296876P.
XX 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MACE/) MACEJAK D.
XX (MCSW/) MCSWIGGEN J.
XX (MORR/) MORRISSEY D.
XX (PAVC/) PAVCO P.
XX (LEEP/) LEE P.
XX (DRAP/) DRAPER K.
XX (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Example 1; Page 148; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HBV
XX ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
XX disclosed in the present invention
XX
XX Sequence 17 BP; 2 A; 8 C; 4 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.4; DB 1; Length 17;
XX Best Local Similarity 78.6%; Pred. No. 5.3e+02;
XX Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1084 CCAGCCTCACCCC 1097
XX ||||| :|||
XX 2 CCAGGCUACACCCC 15
XX
XX RESULT 560

```

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ACD51587
ID ACD51587 standard; RNA; 17 BP.
XX
AC ACD51587;
XX
DT 24-SEP-2003 (first entry)
XX
DE HBV hammerhead ribozyme substrate sequence #645.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW ambzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis B virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX
XX 08-JUN-2001; 2001US-00877478.
XX
XX 08-JUN-2001; 2001US-0296876P.
XX
XX 24-OCT-2001; 2001US-0335059P.
XX
XX 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (BLAT/) BLATT L.
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XX (MACE/) MACEJAK D.
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XX (MCSW/) MCSWIGGEN J.
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XX
XX (PAVC/) PAVCO P.
XX
XX (LEEP/) LEE P.
XX
XX (DRAP/) DRAPER K.
XX
XX (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Example 1; Page 148; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or amberzyme sequences
CC disclosed in the present invention
XX
XX Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;
SQ
```

```
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 78.6%; Pred. No. 5.3e+02;
Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1084 CCAGGCTTCACCCC 1097
DB 1 CCAGGGUUCACCCC 14
||||| :|||||
||||| :|||||

RESULT 561
ACCG66032
ID ACCG66032 standard; DNA; 17 BP.
XX
AC ACCG66032;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 3279.
XX
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001PR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 414; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC6806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 4 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
SQ
```

```
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1121 CCAGTTCACCTTC 1134
DB 4 CCAGTACCACTTC 17
|||||
|||||

RESULT 562
ACCG7296
ID ACCG7296 standard; DNA; 17 BP.
XX
XX Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;
```

AC ACC67296;
 XX 01-JUL-2003 (first entry)
 XX Murine oligonucleotide associated with tumour suppression, SEQ ID 4543.
 DE
 XX
 XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; ss.
 XX
 OS Mus musculus.
 XX
 XX WO2003025176-A2.
 XX
 XX 27-MAR-2003.
 XX
 XX 17-SEP-2002; 2002WO-IB004210.
 XX
 XX 17-SEP-2001; 2001FR-00011979.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-333167/31.
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 XX Disclosure; Page 562; 738pp; French.
 XX
 XX The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 XX
 XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 911 TCTTTGGTCTTTC 924
 DB 3 TCTTTGGTCTTTC 16
 RESULT 563
 ADB42368
 ID ADB42368 standard; DNA; 17 BP.
 XX
 XX ADB42368;
 XX
 XX 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX
 XX Tumour suppression/reversion associated nucleotide #2691.
 DE
 XX
 XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX
 OS Homo sapiens.
 XX
 XX WO2003040369-A2.
 XX
 XX 15-MAY-2003.

PN WO2003040369-A2.
 XX
 XX 15-MAY-2003.
 XX
 XX 17-SEP-2002; 2002WO-IB004219.
 XX
 XX 17-SEP-2001; 2001FR-00011981.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-441574/41.
 XX
 XX New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 XX Disclosure; Page 346; 771pp; French.
 XX
 XX The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 XX
 XX Sequence 17 BP; 3 A; 9 C; 1 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 930 ATCCCTCTCTTCA 943
 DB 2 ATCCCTCTCTTCA 15
 RESULT 564
 ADB43841/c
 ID ADB43841 standard; DNA; 17 BP.
 XX
 XX ADB43841;
 XX
 XX 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX
 XX Tumour suppression/reversion associated nucleotide #4164.
 DE
 XX
 XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX
 OS Homo sapiens.
 XX
 XX WO2003040369-A2.
 XX
 XX 15-MAY-2003.

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XX PF 17-SEP-2002; 2002WO-IB004219.
XX PR 17-SEP-2001; 2001FR-00011981.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX PS WPI; 2003-441574/41.
XX PT New nucleic acid encoding human prostate membrane-specific antigen,
XX PT useful e.g. for treatment of tumors and viral infection, also related
XX PS polypeptide and antibodies.
XX PS Disclosure; Page 518; 771pp; French.
XX CC The invention relates to the isolation of 6327 nucleotide sequences,
XX CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX CC sequence having at least 80% identity, after optimal alignment, with the
XX CC nucleotides, a sequence that hybridizes under stringent conditions with
XX CC the nucleotides, or the complement, or corresponding RNA, of the
XX CC nucleotides. The nucleotides are used as probes or primers for detecting,
XX CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX CC sense and antisense sequences, of nucleotides involved in tumour
XX CC suppression or reversion, apoptosis and or viral resistance, to produce
XX CC recombinant polypeptides, and to prepare transgenic animals, as
XX CC experimental models. The nucleotides (also vectors containing them and
XX CC cells containing the vectors), the encoded polypeptides and antibodies
XX CC (Ab) against the polypeptide are useful for prevention and/or treatment
XX CC of viral infections or diseases characterized by development of tumours
XX CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX CC Analysis of the expression of the nucleotides can be used for diagnosis
XX CC and/or prognosis of these diseases. The nucleotides and polypeptides can
XX CC also be used to screen for their specific interactive molecules,
XX CC potentially useful for treating diseases associated with abnormal
XX CC expression of the nucleotides.
XX SQ Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
      Query Match 0.6%; Score 12.4; DB 1; Length 17;
      Best Local Similarity 92.9%; Pred. No. 5.3e+02;
      Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1099 ACCCTGGGCTTCAG 1112
Db 17 AACCTGGGCTTCAG 4

RESULT 565
ADB40322
ID ADB40322 standard; DNA; 17 BP.
XX AC ADB40322;
XX DT 18-DEC-2003 (revised)
XX DT 04-DEC-2003 (first entry)
XX DE Tumour suppression/reversion associated nucleotide #645.
XX KW diagnosis.
XX OS Homo sapiens.
XX OS WO2003040369-A2.
XX PN 15-MAY-2003.
XX PD 17-SEP-2002; 2002WO-IB004219.
XX PF 17-SEP-2001; 2001FR-00011981.
XX PR (MOLE-) MOLECULAR ENGINES LAB.
XX PA Telerman A, Amson R, Tuijnder M;

XX PF 17-SEP-2002; 2002WO-IB004219.
XX PR 17-SEP-2001; 2001FR-00011981.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX PS WPI; 2003-441574/41.
XX PT New nucleic acid encoding human prostate membrane-specific antigen,
XX PT useful e.g. for treatment of tumors and viral infection, also related
XX PS polypeptide and antibodies.
XX PS Disclosure; Page 107; 771pp; French.
XX CC The invention relates to the isolation of 6327 nucleotide sequences,
XX CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX CC sequence having at least 80% identity, after optimal alignment, with the
XX CC nucleotides, a sequence that hybridizes under stringent conditions with
XX CC the nucleotides, or the complement, or corresponding RNA, of the
XX CC nucleotides. The nucleotides are used as probes or primers for detecting,
XX CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX CC sense and antisense sequences, of nucleotides involved in tumour
XX CC suppression or reversion, apoptosis and or viral resistance, to produce
XX CC recombinant polypeptides, and to prepare transgenic animals, as
XX CC experimental models. The nucleotides (also vectors containing them and
XX CC cells containing the vectors), the encoded polypeptides and antibodies
XX CC (Ab) against the polypeptide are useful for prevention and/or treatment
XX CC of viral infections or diseases characterized by development of tumours
XX CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX CC Analysis of the expression of the nucleotides can be used for diagnosis
XX CC and/or prognosis of these diseases. The nucleotides and polypeptides can
XX CC also be used to screen for their specific interactive molecules,
XX CC potentially useful for treating diseases associated with abnormal
XX CC expression of the nucleotides.
XX SQ Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
      Query Match 0.6%; Score 12.4; DB 1; Length 17;
      Best Local Similarity 92.9%; Pred. No. 5.3e+02;
      Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 903 GGTCATTTTCTTTG 916
Db 1 GATCATTTTCTTTG 14

RESULT 566
ADB41142/c
ID ADB41142 standard; DNA; 17 BP.
XX AC ADB41142;
XX DT 18-DEC-2003 (revised)
XX DT 04-DEC-2003 (first entry)
XX DE Tumour suppression/reversion associated nucleotide #1465.
XX KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX KW primer; probe; tumour suppression; tumour reversion; apoptosis;
XX KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX KW diagnosis.
XX OS Homo sapiens.
XX OS WO2003040369-A2.
XX PN 15-MAY-2003.
XX PD 17-SEP-2002; 2002WO-IB004219.
XX PF 17-SEP-2001; 2001FR-00011981.
XX PR (MOLE-) MOLECULAR ENGINES LAB.
XX PA Telerman A, Amson R, Tuijnder M;

```

DR WPI; 2003-441574/41.
XX New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 203; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 3 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 971 GGAAAGTCCAGATC 984
DB 14 GGAAAGTCCAGATC 1
RESULT 567
ADB42329/c
ID ADB42329 standard; DNA; 17 BP.
XX
AC ADB42329;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #2652.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related

PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 342; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 4 A; 1 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1258 CCCAACCCCTTCA 1271
DB 16 CCCAACCCCTTGA 3
RESULT 568
ADB40653/c
ID ADB40653 standard; DNA; 17 BP.
XX
AC ADB40653;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #976.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.

PS Disclosure; Page 146; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, CC potentially useful for treating diseases associated with abnormal CC expression of the nucleotides.

XX Sequence 17 BP; 8 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 904 GTCATTTCTTTGG 917
17 GACATTTCTTTGG 4

Db

RESULT 569
ADC03827/c
ID ADC03827 standard; DNA; 17 BP.
AC ADC03827;
XX
XX 18-DEC-2003 (first entry)
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #274.
DE ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
KW NHELP1; passive replacement therapy; vaccine; diagnosis.
XX Homo sapiens.
XX EP1273660-A2.
XX 08-JAN-2003.
XX 25-JAN-2002; 2002EP-00001160.
XX 30-JAN-2001; 2001WO-US000666.
PR 23-MAY-2001; 2001US-00864761.
PR 21-DEC-2001; 2001US-0343331P.
XX (AEOM-) AEOMICA INC.
XX Gu Y;
XX WPI; 2003-302724/30.
XX New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.
XX Example 2; SEQ ID NO 314; 468pp; English.
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in

CC exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in

CC exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in

CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
CC spanning the sequence of the human NHELP1 gene (ADC03514).

XX Sequence 17 BP; 6 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 CAGTTCACCTTCA 1135

Db 17 CAGTTCACCTTCA 4

RESULT 571

ADC03826/c
ID ADC03826 standard; DNA; 17 BP.

XX AC ADC03826;

XX DT 18-DEC-2003 (first entry)

XX DE Human Na/H exchanger-like protein 1 gene oligonucleotide #273.

XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHELP1; passive replacement therapy; vaccine; diagnosis.

XX OS Homo sapiens.

XX PN EP1273660-A2.

XX PD 08-JAN-2003.

XX PF 25-JAN-2002; 2002EP-00001160.

XX PR 30-JAN-2001; 2001WO-US000666.

XX PR 23-MAY-2001; 2001US-00864761.

XX PR 21-DEC-2001; 2001US-0343331P.

XX PA (AEOM-) AEOMICA INC.

XX PI Gu Y;

XX WPI; 2003-302724/30.

XX New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHELP1.

XX Example 2; SEQ ID NO 313; 468pp; English.

XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHELP1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHELP1. The NHELP1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHELP1 gene (ADC03514).

XX Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 CAGTTCACCTTCA 1135

Db 15 CAGTTCACCTTCA 2

RESULT 572

ADC03825/c
ID ADC03825 standard; DNA; 17 BP.

XX AC ADC03825;

XX DT 18-DEC-2003 (first entry)

XX DE Human Na/H exchanger-like protein 1 gene oligonucleotide #272.

XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHELP1; passive replacement therapy; vaccine; diagnosis.

XX OS Homo sapiens.

XX PN EP1273660-A2.

XX PD 08-JAN-2003.

XX PF 25-JAN-2002; 2002EP-00001160.

XX PR 30-JAN-2001; 2001WO-US000666.

XX PR 23-MAY-2001; 2001US-00864761.

XX PR 21-DEC-2001; 2001US-0343331P.

XX PA (AEOM-) AEOMICA INC.

XX PI Gu Y;

XX WPI; 2003-302724/30.

XX New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHELP1.

XX Example 2; SEQ ID NO 312; 468pp; English.

XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHELP1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHELP1. The NHELP1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHELP1 gene (ADC03514).

XX Sequence 17 BP; 6 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 CAGTTCACCTTCA 1135

Db 16 CAGTTCACCTTCA 3

RESULT 573

ADB45380
ID ADB45380 standard; DNA; 17 BP.

XX AC ADB45380;

XX

DT 18-DEC-2003 (first entry)
 XX Tumour suppression/reversion associated nucleotide #5703.
 DE
 XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 KW
 XX Homo sapiens.
 OS
 XX WO2003040369-A2.
 PN
 XX 15-MAY-2003.
 PD
 XX 17-SEP-2002; 2002WO-IB004219.
 PF
 XX 17-SEP-2001; 2001FR-00011981.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 XX Telerman A, Amson R, Tuijnder M;
 PI
 XX WPI; 2003-441574/41.
 DR
 XX New nucleic acid encoding human prostate membrane-specific antigen,
 XX useful e.g. for treatment of tumors and viral infection, also related
 XX polypeptide and antibodies.
 XX
 XX Disclosure; Page 698; 771pp; French.
 PS
 XX The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 CC
 XX Sequence 17 BP; 4 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 796 TCTCTAGTAACTG 809
 Db 3 TCTCTGTGTAACG 16
 RESULT 574
 ADB44348
 ID ADB44348 standard; DNA; 17 BP.
 AC ADB44348;
 XX
 XX 18-DEC-2003 (first entry)
 DT
 XX Tumour suppression/reversion associated nucleotide #4671.
 DE
 XX
 KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 KW
 XX Homo sapiens.
 OS
 XX WO2003040369-A2.
 PN
 XX 15-MAY-2003.
 PD
 XX 17-SEP-2002; 2002WO-IB004219.
 PF
 XX 17-SEP-2001; 2001FR-00011981.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 XX Telerman A, Amson R, Tuijnder M;
 PI
 XX WPI; 2003-441574/41.
 DR
 XX New nucleic acid encoding human prostate membrane-specific antigen,
 XX useful e.g. for treatment of tumors and viral infection, also related
 XX polypeptide and antibodies.
 XX
 XX Disclosure; Page 698; 771pp; French.
 PS
 XX The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 CC
 XX Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 911 TCTTTGGTCTTTC 924
 Db 3 TCTTTGGTCTTTC 16
 RESULT 575
 ADC70411
 ID ADC70411 standard; DNA; 17 BP.
 AC ADC70411;
 XX
 XX 18-DEC-2003 (first entry)
 DT
 XX Primer oligo used for analysing CpG islands in genomic DNA (SeqID 901).
 DE
 XX PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
 KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
 KW cytosine methylation state.
 XX

PS Example 1; SEQ ID NO 42; 423pp; English.

XX The invention relates to a method of predicting the potential of

CC oligonucleotides to hybridise to target nucleotide sequences. The method

CC is useful for predicting the potential of an oligonucleotide to hybridise

CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that

CC contains chemically modified nucleotides. The method is also useful for

CC predicting the potential of the oligonucleotides to hybridise to a

CC complementary target nucleotide sequence. The method is useful to predict

CC efficient hybridisation oligonucleotides for each of multiple target

CC sequences therefore very large arrays may be constructed and tested with a

CC minimum synthesis of oligonucleotides. The present sequence represents a

CC rabbit beta-globin derived oligonucleotide sequence.

XX Sequence 17 BP; 3 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCCACCTTCACCT 1138

Db 2 TTCCACCTTCACCT 15

RESULT 579

ADD80970

ID ADD80970 standard; DNA; 17 BP.

XX AC ADD80970;

DT 29-JAN-2004 (first entry)

XX Rabbit beta-globin fragment derived oligonucleotide #4.

DE ss; oligonucleotide hybridisation potential; efficient hybridisation;

XX KW large array; minimum oligonucleotide synthesis; rabbit; beta-globin.

XX OS Oryctolagus cuniculus.

XX US2003054346-A1.

XX 20-MAR-2003.

XX 15-FEB-2001; 2001US-00784674.

XX 10-FEB-1998; 98US-00021701.

XX (SHAN/) SHANNON K W.

XX (WOLB/) WOLBER P K.

XX (DELE/) DELENSTARR G C.

XX (WEBB/) WEBB P G.

XX (KINC/) KINCAID R H.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target

PT nucleotide sequence comprises determining and evaluating for each

PT oligonucleotide a parameter predictive of the oligonucleotides ability to

PT hybridize with target.

XX Example 1; SEQ ID NO 43; 423pp; English.

XX The invention relates to a method of predicting the potential of

CC oligonucleotides to hybridise to target nucleotide sequences. The method

CC is useful for predicting the potential of an oligonucleotide to hybridise

CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that

CC contains chemically modified nucleotides. The method is also useful for

CC predicting the potential of the oligonucleotides to hybridise to a

CC complementary target nucleotide sequence. The method is useful to predict

CC efficient hybridisation oligonucleotides for each of multiple target

XX Detecting and differentiating cytosine methylation state of genomic DNA,

PT useful for diagnosing, treating prognosticating and/or monitoring lung

PT cell proliferative disorders e.g. adenocarcinoma and squamous cell

PT carcinoma.

XX Claim 15; SEQ ID NO 899; 58pp; English.

XX This invention relates to a novel method for detecting and

CC differentiating between lung cell proliferative disorders associated with

CC at least one gene and/or their regulatory regions. Specifically, it

CC refers to a method comprising contacting a target nucleic acid in a

CC biological sample with at least one reagent, wherein the reagent is able

CC to distinguish between methylated and non-methylated CpG dinucleotides

CC present in the target DNA. As such, it is possible to further

CC differentiate and diagnose medical conditions including adenocarcinoma

CC and squamous cell carcinoma, and their respective adjacent lung tissue.

CC The present invention describes cytosine oligomers and PNA-oligomers

CC that are useful as probes for determining the cytosine methylation state

CC or single nucleotide polymorphisms (SNPs) of the target sequence. This

CC oligonucleotide sequence is a primer oligomer used for the analysis of

CC CpG positions within genomic DNA, used in an exemplification of the

CC invention.

XX Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 898 CCCTGCTCATTTT 911

Db 4 CCCTGCTCATTTT 17

RESULT 578

ADD80969

ID ADD80969 standard; DNA; 17 BP.

XX AC ADD80969;

DT 29-JAN-2004 (first entry)

XX Rabbit beta-globin fragment derived oligonucleotide #3.

DE ss; oligonucleotide hybridisation potential; efficient hybridisation;

XX KW large array; minimum oligonucleotide synthesis; rabbit; beta-globin.

XX OS Oryctolagus cuniculus.

XX US2003054346-A1.

XX 20-MAR-2003.

XX 15-FEB-2001; 2001US-00784674.

XX 10-FEB-1998; 98US-00021701.

XX (SHAN/) SHANNON K W.

XX (WOLB/) WOLBER P K.

XX (DELE/) DELENSTARR G C.

XX (WEBB/) WEBB P G.

XX (KINC/) KINCAID R H.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target

PT nucleotide sequence comprises determining and evaluating for each

PT oligonucleotide a parameter predictive of the oligonucleotides ability to

PT hybridize with target.

CC sequences therefore very large arrays may be constructed and tested with
 CC minimum synthesis of oligonucleotides. The present sequence represents a
 CC rabbit beta-globin derived oligonucleotide sequence.

XX SQ Sequence 17 BP; 3 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCCACCTTCACCT 1138
 |||||
 Db 1 TTCCACCTTCACCT 14

RESULT 580

ADD80968
 ID ADD80968 standard; DNA; 17 BP.

XX AC ADD80968;

XX 29-JAN-2004 (first entry)

XX DE Rabbit beta-globin fragment derived oligonucleotide #2.

XX ss; oligonucleotide hybridisation potential; efficient hybridisation;
 KW large array; minimum oligonucleotide synthesis; rabbit; beta-globin.

XX OS Oryctolagus cuniculus.

XX PN US2003054346-A1.

XX PD 20-MAR-2003.

XX PF 15-FEB-2001; 2001US-00784674.

XX PR 10-FEB-1998; 98US-00021701.

XX PA (SHAN/) SHANNON K W.

XX PA (WOLB/) WOLBER P K.

XX PA (DELE/) DELENSTARR G C.

XX PA (WEBB/) WEBB P G.

XX PA (KINC/) KINCAID R H.

XX PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target
 PT nucleotide sequence comprises determining and evaluating for each
 PT oligonucleotide a parameter predictive of the oligonucleotides ability to
 PT hybridize with target.

XX Example 1; SEQ ID NO 41; 423pp; English.

XX The invention relates to a method of predicting the potential of
 CC oligonucleotides to hybridize to target nucleotide sequences. The method
 CC is useful for predicting the potential of an oligonucleotide to hybridize
 CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that
 CC contains chemically modified nucleotides. The method is also useful for
 CC predicting the potential of the oligonucleotides to hybridize to a
 CC complementary target nucleotide sequence. The method is useful to predict
 CC efficient hybridisation oligonucleotides for each of multiple target
 CC sequences therefore very large arrays may be constructed and tested with
 CC minimum synthesis of oligonucleotides. The present sequence represents a
 CC rabbit beta-globin derived oligonucleotide sequence.

XX SQ Sequence 17 BP; 3 A; 7 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCCACCTTCACCT 1138
 |||||
 Db 3 TTCCACCTTCACCT 16

RESULT 581

ADD80967
 ID ADD80967 standard; DNA; 17 BP.

XX AC ADD80967;

XX 29-JAN-2004 (first entry)

XX DE Rabbit beta-globin fragment derived oligonucleotide #1.

XX ss; oligonucleotide hybridisation potential; efficient hybridisation;
 KW large array; minimum oligonucleotide synthesis; rabbit; beta-globin.

XX OS Oryctolagus cuniculus.

XX PN US2003054346-A1.

XX PD 20-MAR-2003.

XX PF 15-FEB-2001; 2001US-00784674.

XX PR 10-FEB-1998; 98US-00021701.

XX PA (SHAN/) SHANNON K W.

XX PA (WOLB/) WOLBER P K.

XX PA (DELE/) DELENSTARR G C.

XX PA (WEBB/) WEBB P G.

XX PA (KINC/) KINCAID R H.

XX PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target
 PT nucleotide sequence comprises determining and evaluating for each
 PT oligonucleotide a parameter predictive of the oligonucleotides ability to
 PT hybridize with target.

XX Example 1; SEQ ID NO 40; 423pp; English.

XX The invention relates to a method of predicting the potential of
 CC oligonucleotides to hybridize to target nucleotide sequences. The method
 CC is useful for predicting the potential of an oligonucleotide to hybridize
 CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that
 CC contains chemically modified nucleotides. The method is also useful for
 CC predicting the potential of the oligonucleotides to hybridize to a
 CC complementary target nucleotide sequence. The method is useful to predict
 CC efficient hybridisation oligonucleotides for each of multiple target
 CC sequences therefore very large arrays may be constructed and tested with
 CC minimum synthesis of oligonucleotides. The present sequence represents a
 CC rabbit beta-globin derived oligonucleotide sequence.

XX SQ Sequence 17 BP; 3 A; 7 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCCACCTTCACCT 1138
 |||||
 Db 4 TTCCACCTTCACCT 17

RESULT 582

ABK01807
 ID ABK01807 standard; RNA; 17 BP.

XX AC ABK01807;

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NCH motif) or an ambezyme (cleaving RNA with an NGN triplet), a zyme (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20-targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NGO-targetting nucleic acid is used to cleave RNA of the NGO gene in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, the nucleic acid may be contacted with a cell to reduce NGO activity of the cell and treat a patient having a condition associated with the level of NGO. The treatment may further comprise the use of one or more therapies. In particular, the NGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (stroke), dementia, multiple sclerosis (MS), and neurodegenerative disease.

CC occurrence of, and for treating neurodegenerative disease, particularly
 CC Alzheimer's disease. The present sequence is a PCR primer, which was used
 CC in the method of the invention.

XX Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 18;

XX Best Local Similarity 92.9%; Pred. No. 6.2e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1081 ACTCCAGGCTTCAC 1094

DB 2 ACTCCAGGCTTC 15

RESULT 584

ADA50406/c

ID ADA50406 standard; DNA; 17 BP.

XX AC

ADA50406;

XX 20-NOV-2003 (first entry)

XX Thermus scotoductus nucleic acid polymerase PCR primer SEQ ID NO:30.

XX nucleic acid polymerase; enzyme; Thermus scotoductus; DNA polymerase;
 KW salt tolerance; thermostability; PCR primer; ss.

XX Synthetic.

OS Thermus scotoductus.

XX WO2003066804-A2.

XX 14-AUG-2003.

XX PF 13-SEP-2002; 2002WO-US029102.

XX PR 14-SEP-2001; 2001US-0322218P.

XX PR 30-NOV-2001; 2001US-0334489P.

XX (APPL-) APPLERA CORP.

PA (BOLC/) BOLCHAKOVA E V.

PA (ROZZ/) ROZZELLE J E.

XX Bolchakova EV, Rozzelle JE;

XX WPI; 2003-663590/62.

XX New nucleic acid encoding a Thermus scotoductus strain X-1, ATCC Deposit
 PT No. 27978 nucleic acid polymerase, useful for producing nucleic acid
 PT polymerases having e.g., improved sequence discrimination or better salt
 PT tolerance.

XX Example 1; Page 79; 179pp; English.

XX The present invention describes isolated nucleic acids encoding nucleic
 CC acid polymerases from Thermus scotoductus. Also described: (1) an
 CC isolated nucleic acid (I) encoding a nucleic acid polymerase from Thermus
 CC scotoductus strain X-1, ATCC Deposit No. 27978; (2) an isolated DNA
 CC polymerase polypeptide from Thermus scotoductus strain X-1, ATCC Deposit
 CC No. 27978; (3) an isolated nucleic acid (II) comprising any of a set of
 CC 12 nucleic acid sequences (S1, see ADA50425 to ADA50436) which encodes a
 CC nucleic acid polymerase; (4) an isolated nucleic acid (III) encoding a
 CC nucleic acid polymerase comprising any of a set of 16 amino acid
 CC sequences (S2, see ADA50389 to ADA50404); (5) isolated nucleic acid
 CC polymerases comprising any of amino acid sequences S2; (6) vectors
 CC comprising (I), (II), or (III), and especially expression vectors in
 CC which the nucleic acid polymerase gene is operably linked to a promoter;
 CC (7) a host cell comprising an isolated nucleic acid molecule encoding a
 CC nucleic acid polymerase from Thermus scotoductus strain X-1, ATCC Deposit
 CC No. 27978; (8) a host cell comprising (I) or (II); (9) a kit comprising a
 CC container containing a nucleic acid polymerase comprising any of amino
 CC acid sequences S2; (10) preparing (MI) a nucleic acid polymerase

CC comprising any of amino acid sequences S2 by incubating a host cell
 CC comprising an encoding nucleic acid under conditions sufficient for RNA
 CC transcription and translation; (11) a nucleic acid polymerase prepared by
 CC M1; (12) synthesising DNA (M2) comprising a polypeptide
 CC comprising any of amino acid sequences S2 with a DNA under conditions
 CC sufficient to permit DNA polymerisation; (13) a method (M3) for
 CC thermocyclic amplification of nucleic acid; and (14) a method (M4) of
 CC primer extension. The nucleic acid is useful for producing nucleic acid
 CC polymerases having improved sequence discrimination, better salt
 CC tolerance or varying degrees of thermostability with applications e.g. in
 CC PCR and DNA sequencing. The present sequence represents a PCR primer for
 CC Thermus scotoductus nucleic acid polymerase, which is used in an example
 CC from the present invention.

XX Sequence 17 BP; 3 A; 11 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 301 CTGGAGCTGTGTGGG 317

DB 17 CTGGAGGTGGAGTGGG 1

RESULT 585

ACC79937/c

ID ACC79937 standard; DNA; 17 BP.

XX AC

ACC79937;

XX 09-SEP-2003 (first entry)

XX Thermus oshimai nucleic acid polymerase PCR primer SEQ ID NO:30.

XX Thermus oshimai; nucleic acid polymerase; enzyme; DNA sequencing;
 KW amplification; reverse transcription; RNA amplification;
 KW primer extension; PCR primer; ss.

XX Thermus oshimai.

OS Synthetic.

XX WO2003048310-A2.

XX 12-JUN-2003.

XX 22-NOV-2002; 2002WO-US037764.

XX 30-NOV-2001; 2001US-0334798P.

XX (APPL-) APPLERA CORP.

XX Bolchakova E, Rozzelle J;

XX WPI; 2003-505286/47.

XX New nucleic acid, useful for DNA sequencing or amplification, reverse
 PT transcription, RNA amplification or primer extension reactions.

XX Example 1; Page 50; 64pp; English.

XX The present invention describes a nucleic acid (I) encoding a nucleic
 CC acid polymerase or a derivative nucleic acid polymerase with a mutation
 CC that decreases 5-3' exonuclease activity or that reduces discrimination
 CC against dideoxynucleotide triphosphates. Also described: (1) a vector
 CC comprising the nucleic acid (I); (2) a host cell comprising the nucleic
 CC acid (I); (3) a nucleic acid polymerase or its derivative; (4) a kit
 CC comprising a container containing the nucleic acid polymerase of (3); (5)
 CC making the nucleic acid polymerase of (3); (6) synthesising a DNA; (7)
 CC thermocyclic amplification of nucleic acid; and (8) primer extending a
 CC DNA. The nucleic acid (I) is useful for DNA sequencing or amplification,
 CC reverse transcription, RNA amplification or primer extension reactions.
 CC The present sequence represents a PCR primer for Thermus oshimai nucleic

CC acid polymerase, which is used in an example from the present invention
 XX
 SQ Sequence 17 BP; 3 A; 11 C; 1 G; 2 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 301 CTGGAGCTGTTGGTGG 317
 Db 17 CTGGAGCTGAGGTGGG 1
 RESULT 586
 AAQ11387/c
 ID AAQ11387 standard; DNA; 17 BP.
 XX
 AC AAQ11387;
 XX
 DT 25-MAR-2003 (revised)
 DT 02-JUL-1991 (first entry)
 XX
 DE Probe COD 931 specific for T. hyo 39kD antigen gene 2.
 XX
 KW Swine dysentery; vaccine.
 XX
 OS Synthetic.
 XX
 PN WO9104036-A.
 XX
 PD 04-APR-1991.
 XX
 PF 13-SEP-1989; 89US-00406535.
 XX
 PR 13-SEP-1989; 89US-00406535.
 XX
 PA (MLTE-) ML TECHN VENTURES.
 XX
 PI Gabe J, Dragon E, Mccaman M;
 XX
 DR WPI; 1991-117317/16.
 XX
 PT Treponema hyodysenteriae antigens - having molecular wt. of 39 K daltons
 XX and their DNA codes, and use for preparing vaccine.
 XX
 PS Disclosure; Page 38; 84pp; English.
 XX
 CC The probe was designed from the sequence of the pTrep330 encoding the T.
 CC hyo 39 kD antigen no. 2. It was used for screening of clones prepd. from
 CC T. hyo genomic DNA following PCR treatment. See also AAQ11377-Q11409.
 CC (Updated on 25-MAR-2003 to correct PA field.)
 XX
 SQ Sequence 17 BP; 8 A; 1 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 928 TTATCCCTCCTCTTCAT 944
 Db 17 TTATCCGTCAATTCAT 1
 RESULT 587
 AAQ21838
 ID AAQ21838 standard; DNA; 17 BP.
 XX
 AC AAQ21838;
 XX
 DT 25-JUN-1992 (first entry)
 DE Antisense polyamine-conjugated oligonucleotide to papilloma virus.
 XX

KW Initiation of translation sequence; antisense therapy; phosphorothioate;
 KW nuclease resistance; ss.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "5'-deoxy-5'-(diphenylimidazolin-2-yl) thymidine"
 XX
 PN WO9202531-A.
 XX
 PD 20-FEB-1992.
 XX
 PF 27-JUL-1990; 90US-00558663.
 XX
 PR 27-JUL-1990; 90US-00558663.
 XX
 PA (ISIS-) ISIS PHARMA INC.
 XX
 PI Cook PD, Guinasso CJ;
 XX
 DR WPI; 1992-080013/10.
 XX
 PT New poly-amine conjugated oligo-nucleotide analogues - target TAT region
 XX of HIV and portions of Herpes and papilloma genome(s).
 PS Example 3; Page 17; 26pp; English.
 XX
 CC A phosphorothioate oligonucleotide able to hybridise to Papilloma virus
 CC initiation of translation sequence was synthesised. The 5' thymidine
 CC derivative was conjugated with a polyamine, pref. tris(aminobutyl)amine.
 CC The resulting oligonucleotide analogue has enhanced cellular uptake and
 CC is less susceptible to nuclease activity than standard oligonucleotides.
 CC It can be used in anti-sense therapy. See AAQ21836-Q21842
 XX
 SQ Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 929 TATCCCTCCTCTTCAT 945
 Db 1 TCTCCATCCTCTTCAT 17
 RESULT 588
 AAQ57302
 ID AAQ57302 standard; mRNA; 17 BP.
 XX
 AC AAQ57302;
 XX
 DT 25-MAR-2003 (revised)
 DT 26-JUL-1994 (first entry)
 XX
 DE Enzymatic RNA molecule c-myb mRNA target sequence.
 XX
 KW Specific; cleavage; target RNA; protein; prophylaxis; expression;
 KW inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;
 KW asthma; inflammatory diseases; restenosis; cardiovascular condition;
 KW hypertension; arthritis; ss.
 XX
 OS Synthetic.
 XX
 PN WO9402595-A1.
 XX
 PD 03-FEB-1994.
 XX
 PF 02-JUL-1993; 93WO-US006316.
 XX
 PR 17-JUL-1992; 92US-00916763.

PR 07-DEC-1992; 92US-00987132.
 PR 07-DEC-1992; 92US-00989848.
 PR 07-DEC-1992; 92US-00989849.
 PR 19-JAN-1993; 93US-00008895.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX Sullivan SM, Draper KG;
 XX WPI; 1994-048853/06.
 DR
 XX Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
 PT inflammatory, arthritic, stenotic or cardiovascular diseases or
 PT conditions.
 XX
 XX Claim 3; Page 20; 65pp; English.
 PS
 XX This is a c-myb mRNA target sequence (nucleotide no. 2695) of an
 CC enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
 CC development or maintenance of a restenotic condition. The concn. of the
 CC ribozyme necessary to effect a therapeutic treatment is lower than that
 CC of an antisense oligonucleotide and the specificity of action is higher.
 CC (Updated on 25-MAR-2003 to correct PN field.)
 XX
 XX Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 910 TTCCTTGGCTTTCCT 926
 DB 1 TGCTATGGCTTTCCT 17
 RESULT 589
 AAQ62032
 ID AAQ62032 standard; DNA; 17 BP.
 XX
 AC AAQ62032;
 XX
 DT 25-MAR-2003 (revised)
 DT 17-NOV-1994 (first entry)
 XX
 DE Mutant Ki-ras codon 12 antisense phosphorothioate oligo ref. 6949.
 XX
 KW Antisense; phosphorothioate; H-ras; translation initiation codon;
 KW codon-12 point mutation; activated; inhibition; ras-luciferase; activity;
 KW detection; modulation; inhibition; expression; oncogene; proliferation;
 KW Ki-ras; cancer cell; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_difference 1..17
 FT /tag= a
 FT /note= "Phosphorothioate linkages"
 XX
 XX WO9408003-A1.
 XX
 PD 14-APR-1994.
 XX
 PF 01-OCT-1993; 93WO-US009346.
 XX
 PR 05-OCT-1992; 92US-00958134.
 PR 21-JAN-1993; 93US-00007996.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 XX Monia BP, Freier SM, Ecker DJ;
 XX WPI; 1994-135570/16.
 XX

PT New oligo:nucleotides hybridisable with H-ras or Ki-ras gene nucleic acid
 PT - in normal or mutated form, for detecting or modulating gene expression,
 PT specifically inhibiting proliferation of cancer cells.
 XX
 PS Disclosure; Page 36; 104pp; English.
 XX
 CC The sequences given in AAQ62025-38 are antisense phosphorothioate
 CC oligonucleotides which are targeted to various regions of Ki-ras
 CC oncogene. These oligonucleotides gave significant and reproducible
 CC inhibition of the level of Ki-ras mRNA. These oligonucleotides may be
 CC used for detecting and modulating, esp. inhibiting, expression of the Ki-
 CC ras gene, esp. for inhibiting proliferation of cancer cells, and other
 CC conditions associated with Ki-ras oncogene activation. Activated (mutant)
 CC Ki-ras can be detected from its differential affinity for particular
 CC oligos. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 XX Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1131 CTTCCCTCCAGCTCCA 1147
 DB 1 CTACGCCACAGCTCCA 17
 RESULT 590
 AAT01734
 ID AAT01734 standard; DNA; 17 BP.
 XX
 AC AAT01734;
 XX
 DT 17-DEC-1995 (first entry)
 XX
 DE Peptide nucleic acid targeting HPV genome.
 XX
 KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
 KW antiviral; diagnostic; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..17
 FT /tag= a
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of amide units, so that the
 FT oligomer consists of the nucleobases attached covalently
 FT to a polyamide backbone"
 XX
 XX WO9504748-A1.
 XX
 PD 16-FEB-1995.
 XX
 PF 09-AUG-1994; 94WO-US009039.
 XX
 PR 09-AUG-1993; 93US-00104438.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsett LM;
 XX WPI; 1995-090841/12.
 XX
 PT New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
 PT papilloma:virus - are stable anti-sense molecules with high affinity for
 PT single stranded DNA, used for treating infections.
 XX
 XX Claim 10; Page 52; 65pp; English.
 PS
 XX New oligomers are claimed which (A) have at least one peptide nucleic
 CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
 CC untranslated region, intron/exon (I/E) junction or coding sequence of

CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
 CC hybridisable to the B, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
 CC papillomavirus. The PNAs can be used to target RNA and single stranded
 CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
 CC they may be used therapeutically for modulating cytomegalovirus and
 CC papillomavirus processes and also as diagnostics (e.g., as probes for
 CC specific mRNAs). PNA oligomers have high affinity for complementary
 CC single stranded DNA. They are also able to form triple helices in which a
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
 CC with the resulting double helix or with the first PNA strand. The PNAs
 CC possess no significant charge and are water soluble, which facilitates
 CC cellular uptake. Further, since they contain amides of non-biological
 CC amino acids, they are biostable and resistant to enzymatic degradation by
 CC proteases. The present sequence targets a portion of the papillomavirus
 CC genome

XX Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTCTCTT 945
 DB 1 TCTCCATCCTCTCTCACT 17

RESULT 591

AAQ79851
 ID AAQ79851 standard; DNA; 17 BP.

AC AAQ79851;

XX 25-MAR-2003 (revised)

DT 04-SEP-1995 (first entry)

XX K-ras modulating sequence, targetted to codon 12 (WT).

XX Peptide nucleic acid; PNA; ligand; peptide backbone; human; H-ras; K-ras;
 KW expression; ras gene; mutation; tumour; cancer; ss.

XX Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1..17

FT /tag= a

FT /note= "Each base is attached to a N-acetyl (2-amino-
 FT ethyl) Gly residue through the N-acetyl group"

XX WO9428720-A1.

XX 22-DEC-1994.

XX 10-JUN-1994; 94WO-US006620.

XX 11-JUN-1993; 93US-00076234.

XX (ISIS-) ISIS PHARM INC.

XX Lima W, Monia B, Freier S, Ecker D;

XX WPI; 1995-035955/05.

XX New peptide nucleic acid oligomers for ras oncogene modulation -
 PT including specific inhibition of the activated gene, for diagnosis and
 PT treatment esp. of tumours.

XX Claim 1; Page 133; 148pp; English.

XX The sequences given in AAQ79822-57 represent peptide nucleic acids (PNA)
 CC that bind to complementary ssDNA and RNA strands through their
 CC oligonucleotide ligands which are linked to a peptide backbone. These
 CC sequences are directed to the human H-ras and K-ras genes and they

CC modulate the expression of the ras gene in cells or tissues and
 CC specifically modulate the expression of the activated ras in cells or
 CC tissues suspected of harbouring a mutated gene. These sequences are
 CC designed to hybridise with the mRNA from the H-ras and K-ras genes which
 CC interferes with the normal role of mRNA causing a loss of function in the
 CC cell. These sequences are used in the treatment of tumours. (Updated on
 CC 25-MAR-2003 to correct PN field.)

XX Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTGACCTCCAGCTCCA 1147

DB 1 CTACGCCACCACTCCA 17

RESULT 592

AA743101

ID AA743101 standard; DNA; 17 BP.

XX AA743101;

XX 05-SEP-1997 (first entry)

DE Antisense RA-beta2-primer to amplify beta2-adrenergic receptor gene.

XX Immortalised cell line; pre-adipocyte; viral oncogene; lipolysis; marker;
 KW thermogenesis; diabetes; obesity; cell culture; differentiation; mature;
 KW medium; insulin; dexamethasone; primer; PCR; polymerase chain reaction;
 KW amplification; adrenergic receptor; ss.

XX Synthetic.

XX WO9634100-A1.

XX 31-OCT-1996.

XX 25-APR-1996; 96WO-FR000634.

XX 25-APR-1995; 95FR-00004922.

XX (CNRS) CNRS CENT NAT RECH SCI.

XX Strosberg AD, Zilberfarb V;

XX WPI; 1996-497632/49.

XX Immortalised pre-adipocytes contg viral oncogene fragment - useful for
 PT identifying cpds that regulate lipolysis and thermogenesis, as lipolytic
 PT agents and models for studying adipocyte processes.

XX Example 1; Page 15; 52pp; French.

XX The invention relates to new immortalised cell lines derived from pre-
 CC adipocytes containing an immortalising fragment of a viral oncogene. The
 CC immortalised adipocytes are used to identify substances able to regulate
 CC lipolysis and/or thermogenesis (potential therapeutic agents for treating
 CC diabetes and obesity). The cell lines have the advantage that they can be
 CC maintained in long term culture (contrast primary cultures of adipocytes)
 CC without loss of characteristic markers or ability to differentiate. The
 CC immortalised pre-adipocytes differentiate into mature adipocytes when
 CC placed in a medium containing insulin and dexamethasone. The primers
 CC AA743098-19 are used to amplify marker genes to verify differentiation of
 CC the pre-adipocytes into mature adipocytes. Primers AA743100-1 were used
 CC to amplify a 329 bp region of the gene encoding the beta-2 adrenergic
 CC receptor, a specific marker for mature adipocytes

XX Sequence 17 BP; 2 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

```

Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1134 CACCTCCAGCTCCACCT 1150
Db 1 CCCATCCTGCTCCACCT 17

RESULT 593
AAT12444/C
ID AAT12444 standard; DNA; 17 BP.
XX AC AAT12444;
XX DT 17-SEP-1996 (first entry)
XX DE Antiviral phosphorothioate oligonucleotide #27.
XX KW Antiviral; phosphorothioate; mRNA 4; mRNA 5; herpes simplex virus 1; HSV;
XX KW viral infection; HIV; varicella zoster virus; VZV; therapy; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..17
FT FT /*tag= a
FT FT /note= "phosphorothioate oligonucleotides"
XX PN WO9603500-A1.
XX XX
XX PD 08-FEB-1996.
XX PF
XX PF 25-JUL-1995; 95WO-JP001472.
XX PR
XX PR 26-JUL-1994; 94JP-00173862.
XX PR 01-NOV-1994; 94JP-00268603.
XX XX
XX PA (LTTL-) LTT INST CO LTD.
XX PA (KAKE) KAKEN PHARM CO LTD.
XX PI Shoji Y, Shimada J, Mizushima Y, Iwatani W, Tamura N;
XX DR WPI; 1996-117045/12.
XX XX
XX PT Antiviral phosphorothioate oligonucleotide(s) - active against e.g.
XX PT herpes simplex virus 1, HIV and varicella zoster virus.
XX PS Claim 6; Page 150; 163pp; Japanese.
XX CC AAT12435-T12454 represent phosphorothioate oligonucleotides with
XX CC antiviral activity. These sequences, and the phosphorothioate
XX CC oligonucleotides represented by AAT12418-T12434 (which are complementary
XX CC to regions of the mRNA 4 or 5 of herpes simplex virus 1 (HSV)), are
XX CC effective in the prevention and treatment of viral infection. The
XX CC sequences are especially effective against infection by HSV, HIV or
XX CC varicella zoster virus (VZV)
XX SQ Sequence 17 BP; 0 A; 2 C; 15 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1238 CCTCTCGCTCCGACCC 1254
Db 17 CCCCGCGCCCGCCCC 1

RESULT 594
AAT93618
ID AAT93618 standard; DNA; 17 BP.
XX XX
XX AC AAT93618;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1173 CTTTCGCGCTCCCGCA 1189
Db 1 CTGCGCGCTCCCGCA 17

RESULT 595
AAX74663
ID AAX74663 standard; RNA; 17 BP.
XX AC AAX74663;
XX DT 28-JUL-1999 (first entry)
XX DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #191.
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX KW tumor angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX KW foetal liver kinase 1; ss.
XX OS Mus sp.
XX PN WO9715662-A2.

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XX 25-MAR-2003 (revised)
DT 27-APR-1998 (first entry)
XX Primer 4 (reverse) used in mycobacteria species-specific diagnosis.
XX Tuberculosis; mycobacteria; infection; diagnosis; Mycobacterium bovis;
KW BCG; Mycobacterium africanum; Mycobacterium microti; PCR; primer; ss.
XX OS Synthetic.
XX OS Mycobacterium tuberculosis.
XX PN WO9741252-A2.
XX PD 06-NOV-1997.
XX PF 18-APR-1997; 97WO-EF001973.
XX PR 29-APR-1996; 96DE-01017184.
XX PA (GBFB) GBF GES BIOTECH FORSCHUNG GMBH.
XX PI Singh M, Honisch C, Espitia C, Moreno C;
XX DR WPI; 1997-549750/50.
XX XX
XX PT New DNA and related proteins or RNA derived from M. tuberculosis - used
XX PT for diagnosis of mycobacterial infections, monitoring vaccination and
XX PT development of anti-mycobacterial agents.
XX XX
XX PF Example 1.4; Page 19; 55pp; English.
XX CC This oligonucleotide, designated PRIMER 4 (reverse), is specific for a
XX CC 2253 bp Mycobacterium tuberculosis chromosomal DNA region (see AAT93611).
XX CC It was designed for use with PRIMER 3 (see AAT93617) to amplify a 377 bp
XX CC region of DNA specifically from M. tuberculosis complex bacteria. No
XX CC amplification product is obtained from other bacteria. Thus, the primers
XX CC of the 377 bp region are useful for the rapid discrimination of M.
XX CC tuberculosis complex (M. tuberculosis, Mycobacterium bovis, BCG,
XX CC Mycobacterium africanum and Mycobacterium microti) from other
XX CC mycobacteria. (Updated on 25-MAR-2003 to correct PR field.)
XX SQ Sequence 17 BP; 1 A; 8 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1173 CTTTCGCGCTCCCGCA 1189
Db 1 CTGCGCGCTCCCGCA 17

RESULT 595
AAX74663
ID AAX74663 standard; RNA; 17 BP.
XX AC AAX74663;
XX DT 28-JUL-1999 (first entry)
XX DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #191.
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX KW tumor angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX KW foetal liver kinase 1; ss.
XX OS Mus sp.
XX PN WO9715662-A2.

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PD 01-MAY-1997.
XX
XX 25-OCT-1996; 96WO-US017480.
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (CHIR ) CHIRON CORP.
XX
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 160; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 3 A; 9 C; 2 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e-02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
QY 1239 CCTGCGCTCCGACCCCA 1255
DB 1 CCUCGCUCCAGGCCA 17
RESULT 596
AAX73174
ID AAX73174 standard; RNA; 17 BP.
AC
AC AAX73174;
XX
XX 28-JUL-1999 (first entry)
DT
XX Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #607.
DE
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Mus sp.
OS
XX WO9715662-A2.
PN
XX
XX 01-MAY-1997.
PD
XX 25-OCT-1996; 96WO-US017480.
PR
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (CHIR ) CHIRON CORP.
XX
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI

```

```

XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 142; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 1 A; 11 C; 3 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e-02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
QY 1083 TCCAGGCTTCACCCCA 1099
DB 1 UCCCGCUCGCCCCCA 17
RESULT 597
AAT93446/C
ID AAT93446 standard; DNA; 17 BP.
XX
XX AAT93446;
AC
XX 06-FEB-1998 (first entry)
DT
XX Probe specific for wild-type tumour necrosis factor (TNF) gene.
DE
XX tumour necrosis factor; TNF; cytokine; hepatitis B virus; HBV; TNF-2;
KW virus infection; interferon; therapy; promoter; PCR primer; TNF-alpha;
KW allele; variant; hybridisation; probe; screening; genotyping; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO9713875-A1.
PN
XX 17-APR-1997.
PD
XX 14-OCT-1996; 96WO-GB002519.
PF
XX 13-OCT-1995; 95GB-00020993.
PR
XX 13-SEP-1996; 96GB-00019233.
PR
XX (UNLO ) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
XX Thursz MR, Thomas HC, Hill AV, Mantafounis D;
PI
XX WPI; 1997-235909/21.
XX
XX Assessing cytokine therapy of a persistent virus infection, e.g hepatitis
PT B virus - by determining presence of allele(s) associated with increased
PT therapeutic response, e.g. tumour necrosis factor-2 allele.
XX
XX Example 2; Page 9; 19pp; English.
XX
XX This oligonucleotide probe is used in the confirmatory DNA sequencing of
CC the PCR amplification of the tumour necrosis factor (TNF) gene. This
CC probe is specific for the wild type TNF. A set of primers are used to
CC amplify a 519 bp promoter fragment of the TNF and TNF-2 allele mutated at

```

CC position -308. The DNA was isolated from the blood sample of patients
CC suffering from chronic hepatitis B virus (HBV) infection. This is used in
CC a novel method for assessing the probable outcome of treating a subject
CC suffering from a persistent virus infection with a cytokine. The method
CC determines whether the subject carries one or more alleles (TNF-alpha
CC allele 1 or 2) associated with therapeutic response when treated with the
CC cytokine by isolating the DNA from the infected patients followed by PCR
CC amplification and detecting the TNF alpha promoter alleles by dot blot
CC hybridisation. The method is used to predict the outcome of persistent
CC HBV infection in a subject, as well as the outcome of cytokine therapy
CC (particularly interferon therapy) in patients suffering from chronic
CC hepatitis infection

XX SQ Sequence 17 BP; 3 A; 2 C; 11 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1252 CCCATCCCAACCCCT 1268
Db 17 CCGTCCCATGCCCT 1

RESULT 598
AAV97640/c
ID AAV97640 standard; RNA; 17 BP.
XX AC AAV97640;
XX DT 17-MAR-1999 (first entry)
XX DE Human EGF-R target sequence nucleotide position 3627.
XX KW Human; epidermal growth factor receptor; EGF-R; target sequence;
XX KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
XX KW cancer; genetic drift; detection; mutation; ss.
XX OS Homo sapiens.
XX PN WO9833893-A2.
XX PD 06-AUG-1998.
XX PR 14-JAN-1998; 98WO-US000730.
XX PR 31-JAN-1997; 97US-0036476P.
XX PR 04-DEC-1997; 97US-00985162.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (UYAS-) UNIV ASTON.
XX PI Akhtar S, Fell P, Mcswiggen JA;
XX WF; 1998-437449/37.
XX DR Enzymatic nucleic acids - which cleave RNA derived from an epidermal
XX PT growth factor receptor, useful for inhibiting cell proliferation and for
XX PT treating cancers.
XX PS Claim 5; Page 76; 109pp; English.

CC The present invention describes enzymatic nucleic acid molecules (NAMS)
CC which specifically cleave RNA derived from an epidermal growth factor
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC represent specifically claimed target sequence from human EGF-R. AAV98044
CC to AAV98866 and AAV98867 to 9878 represent hammerhead ribozymes and
CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for
CC cleaving EGF-R RNA in the treatment of a condition associated with EGF-R
CC expression levels e.g. to inhibit cell proliferation in the prevention or
CC treatment of cancers. The NAMS can also be used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of EGF-R RNA in a cell

XX SQ Sequence 17 BP; 5 A; 6 C; 3 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 889 GTGCTGTGCCCCGTGT 905
Db 17 GTGCTGTGACACAGGT 1

RESULT 599
AAV29726/c
ID AAV29726 standard; DNA; 17 BP.
XX AC AAV29726;
XX DT 03-AUG-1998 (first entry)
XX DE Probe used to exemplify the method of the invention.
XX KW Probe; point mutation; fluorescent resonance energy transfer; FRET;
XX KW fluorescent dye; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX FT /*note= "labelled with a Fluorescent dye leading to
XX FT fluorescent resonance energy transfer"
XX modified_base 17 /*tag= a
XX FT /*note= "labelled with a Fluorescent dye leading to
XX FT fluorescent resonance energy transfer"
XX PN JP10127300-A.
XX PD 19-MAY-1998.
XX PR 31-OCT-1996; 96JP-00290235.
XX PR 31-OCT-1996; 96JP-00290235.
XX PA (HAMM) HAMAMATSU PHOTONICS KK.
XX WF; 1998-340670/30.
XX DR Detection of point mutation and detection of gene abnormality - using
XX PT probe with base sequence and fluorescent dye.
XX PS Disclosure; Page 6; 14pp; Japanese.
XX CC Oligonucleotide probes AAV29709-48 were used to exemplify the method of
XX CC the invention. This method detects the presence of a point mutation in a
XX CC specific sequence of a target nucleic acid. The method comprises using a
XX CC probe which is labelled at 5' and 3' ends with 2 different labels that
XX CC form fluorescent resonance energy transfer (FRET). The ratio of
XX CC fluorescence between both fluorescent dyes at the maximum fluorescent
XX CC absorption wavelength is measured. The fluorescence ratio indicated the
XX CC ratio of target/probe

XX SQ Sequence 17 BP; 2 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTCACTCCAGCTCCA 1147
Db 17 CTAGCCACCACTCCA 1

PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes; type II diabetes; HNF1 gene; transcription factor; insulin; ss.

Synthetic.

WO9821239-A2.

22-MAY-1998.

07-NOV-1997; 97WO-US020532.

12-NOV-1996; 96US-00748229.

15-NOV-1996; 96US-00749431.

04-DEC-1996; 96US-00760246.

10-JAN-1997; 97US-00782047.

(MILL-) MILLENNIUM PHARM INC.

Glucksmann AM;

WPI; 1998-297866/26.

Treating type II diabetes with agent - useful for, e.g. modulating expression of hepatic nuclear factor or other diabetes-related gene.

Disclosure; Page 79; 113pp; English.

This is the nucleotide sequence of the PCR primer used for amplification in the method of the invention, which involves modulating the expression of hepatic nuclear factor or other diabetes related gene. The method is used to treat early onset type II diabetes and defects in insulin secretion. It is based on the discovery that certain mutations in the HNF1 gene, encoding a transcription factor, are involved in these conditions

Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1216 GCTGACCCATCCTTGC 1232

Db 1 GCAGATCCCGCTTGC 17

RESULT 602

AAV41434

ID AAV41434 standard; DNA; 17 BP.

AC AAV41434;

XX 24-SEP-1998 (first entry)

DE Nucleotide sequence of 5' PCR primer 21.

PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes; type II diabetes; HNF1 gene; transcription factor; insulin; ss.

Synthetic.

WO9821239-A2.

22-MAY-1998.

07-NOV-1997; 97WO-US020532.

12-NOV-1996; 96US-00748229.

15-NOV-1996; 96US-00749431.

04-DEC-1996; 96US-00760246.

10-JAN-1997; 97US-00782047.

(MILL-) MILLENNIUM PHARM INC.

KW

XX

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PN

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PF

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PR

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PT

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PT

XX

PS

XX

CC

CC

CC

CC

CC

CC

CC

CC

CC

XX

SQ

RESULT 600
AAV29733
ID AAV29733 standard; DNA; 17 BP.

XX AC AAV29733;

XX 03-AUG-1998 (first entry)

XX Probe used to exemplify the method of the invention.

XX Probe; point mutation; fluorescent resonance energy transfer; FRET;

XX fluorescent dye; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1 /*tag= a

FT /note= "labelled with a Fluorescent dye leading to

FT fluorescent resonance energy transfer"

FT modified_base 17

FT /*tag= a

FT /note= "labelled with a Fluorescent dye leading to

FT fluorescent resonance energy transfer"

XX JPI0127300-A.

XX 19-MAY-1998.

XX 31-OCT-1996; 96JP-00290235.

XX 31-OCT-1996; 96JP-00290235.

XX (HAMM) HAMAMATSU PHOTONICS KK.

XX WPI; 1998-340670/30.

XX Detection of point mutation and detection of gene abnormality - using

XX probe with base sequence and fluorescent dye.

XX Disclosure; Page 6; 14pp; Japanese.

XX Oligonucleotide probes AAV29709-48 were used to exemplify the method of

XX the invention. This method detects the presence of a point mutation in a

XX specific sequence of a target nucleic acid. The method comprises using a

XX probe which is labelled at 5' and 3' ends with 2 different labels that

XX form fluorescent resonance energy transfer (FRET). The ratio of

XX fluorescence between both fluorescent dyes at the maximum fluorescent

XX absorption wavelength is measured. The fluorescence ratio indicated the

XX ratio of target/probe

XX Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTACCTCCAGCTCCA 1147

Db 1 CTACGCCACGCTCCA 17

RESULT 601

AAV41404

ID AAV41404 standard; DNA; 17 BP.

XX AC AAV41404;

XX 24-SEP-1998 (first entry)

XX Nucleotide sequence of 5' PCR primer 3.

XX Glucksmann AM;
 XX WPI; 1998-297866/26.
 XX Treating type II diabetes with agent - useful for, e.g. modulating
 PT expression of hepatic nuclear factor or other diabetes-related gene.
 XX Disclosure; Page 80; 113pp; English.
 XX This is the nucleotide sequence of the PCR primer used for amplification
 CC in the method of the invention, which involves modulating the expression
 CC of hepatic nuclear factor or other diabetes related gene. The method is
 CC used to treat early onset type II diabetes and defects in insulin
 CC secretion. It is based on the discovery that certain mutations in the
 CC HNF1 gene, encoding a transcription factor, are involved in these
 CC conditions
 XX Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1216 GCTGACCCCATCTGTC 1232
 DB 1 GCAGATCCCGCTGTC 17
 RESULT 603
 AAA20940
 ID AAA20940 standard; RNA; 17 BP.
 XX AAA20940;
 AC
 XX 19-JUN-2000 (first entry)
 DT
 XX Integrin alpha 6 subunit substrate sequence SEQ ID NO:4166.
 DE
 XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 KW age related macular degeneration; inflammation; neovascular glaucoma;
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
 KW tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
 XX Homo sapiens.
 OS
 XX W09950403-A2.
 PN
 XX 07-OCT-1999.
 PD
 XX 24-MAR-1999; 99WO-US006507.
 PF
 XX 27-MAR-1998; 98US-0079678P.
 PR
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
 PI
 XX WPI; 1999-591315/50.
 DR
 XX Novel ribozymes for modulating the synthesis, expression and/or stability
 XX of an mRNA encoding an angiogenic factors.
 PT
 XX Claim 55; Page 177; 305pp; English.
 PS
 XX The present invention describes enzymatic nucleic acid molecules with RNA
 CC cleaving activity, which specifically cleave RNA encoded by an aryl
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
 CC AAA21596 to AAA21688 represent their corresponding target sequences;
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
 CC AAA23422 represent their corresponding target sequences. The ribozymes of
 CC the invention are used for modulating the synthesis, expression and/or
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
 CC especially used to treat cancer, diabetic retinopathy, age related
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
 CC angiofibroma of tuberos scleriosis, pot-wine stains, Sturge Weber
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
 CC integrin subunit alpha-6, or integrin subunit beta-3
 XX
 SQ Sequence 17 BP; 7 A; 2 C; 5 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 76.5%; Pred. No. 5.9e+02;
 Matches 13; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 1010 CACCTGAAAAGAGGGG 1026
 DB 1 CAUCUGAUAAGAGAGG 17
 RESULT 604
 AAA22863
 ID AAA22863 standard; RNA; 17 BP.
 XX AAA22863;
 AC
 XX 19-JUN-2000 (first entry)
 DT
 XX Integrin subunit beta 3 substrate sequence SEQ ID NO:6089.
 DE
 XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 KW age related macular degeneration; inflammation; neovascular glaucoma;
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
 KW tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
 XX Homo sapiens.
 OS
 XX W09950403-A2.
 PN
 XX 07-OCT-1999.
 PD
 XX 24-MAR-1999; 99WO-US006507.
 PF
 XX 27-MAR-1998; 98US-0079678P.
 PR
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
 PI
 XX WPI; 1999-591315/50.
 DR
 XX Novel ribozymes for modulating the synthesis, expression and/or stability
 XX of an mRNA encoding an angiogenic factors.
 PT
 XX Claim 55; Page 177; 305pp; English.
 PS
 XX The present invention describes enzymatic nucleic acid molecules with RNA
 CC cleaving activity, which specifically cleave RNA encoded by an aryl
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

PS Claim 54; Page 247; 305pp; English.

XX The present invention describes enzymatic cleavage of nucleic acid molecules with RNA

CC cleaving activity, which specifically cleave RNA encoded by an aryl

CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AA16775 to

CC AA17167 and AA17561 to AA17622 represent ribozyme sequences for ARNT,

CC and AA17168 to AA17560 and AA17623 to AA17684 represent their

CC corresponding target sequences; AA17685 to AA18385 and AA19087 to

CC AA19154 represent ribozyme sequences for Tie-2, and AA18386 to AA19086

CC and AA19155 to AA19222 represent their corresponding target sequences;

CC AA19223 to AA20361 and AA21501 to AA21595 represent ribozyme

CC sequences for integrin alpha 6 subunit, and AA20362 to AA21500 and

CC AA21596 to AA21688 represent their corresponding target sequences;

CC AA21689 to AA22475 and AA23263 to AA23262, AA23343 to

CC AA23422 represent their corresponding target sequences. The ribozymes of

CC the invention are used for modulating the synthesis, expression and/or

CC stability of an mRNA encoding angiogenic factor, especially ARNT,

CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are

CC especially used to treat cancer, diabetic retinopathy, age related

CC macular degeneration (ARMD), inflammation, and arthritis, as well as

CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,

CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber

CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,

CC and other syndromes and diseases related to the levels of ARNT, Tie-2,

CC integrin subunit alpha-6, or integrin subunit beta-3

XX Sequence 17 BP; 6 A; 1 C; 6 G; 0 T; 4 U; 0 Other;

SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 70.6%; Pred. No. 5.9e+02;

Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Oy 1022 AGGGGAGCTTGAGGA 1038

Db 1 AAGGGUUCUUGAGGA 17

RESULT 605

AA17212

ID AA17212 standard; RNA; 17 BP.

XX AA17212;

AC

XX 19-JUN-2000 (first entry)

DE

XX Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:438.

DE

XX Human; aryl hydrocarbon nuclear transport; ARNT; Tie-2; angiogenesis;

KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;

KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;

KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;

KW age related macular degeneration; inflammation; neovascular glaucoma;

KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;

KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;

KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX

OS Homo sapiens.

XX

XX WO9950403-A2.

PN

XX 07-OCT-1999.

PD

XX 24-MAR-1999; 99WO-US006507.

XX

XX 27-MAR-1998; 98US-0079678P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

XX

XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;

XX

XX

DR WPI; 1999-591315/50.

XX Novel ribozymes for modulating the synthesis, expression and/or stability

PT of an mRNA encoding an angiogenic factors.

XX Claim 53; Page 65; 305pp; English.

PS The present invention describes enzymatic cleavage of nucleic acid molecules with RNA

CC cleaving activity, which specifically cleave RNA encoded by an aryl

CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AA16775 to

CC AA17167 and AA17561 to AA17622 represent ribozyme sequences for ARNT,

CC and AA17168 to AA17560 and AA17623 to AA17684 represent their

CC corresponding target sequences; AA17685 to AA18385 and AA19087 to

CC AA19154 represent ribozyme sequences for Tie-2, and AA18386 to AA19086

CC and AA19155 to AA19222 represent their corresponding target sequences;

CC AA19223 to AA20361 and AA21501 to AA21595 represent ribozyme

CC sequences for integrin alpha 6 subunit, and AA20362 to AA21500 and

CC AA21596 to AA21688 represent their corresponding target sequences;

CC AA21689 to AA22475 and AA23263 to AA23262, AA23343 to

CC AA23422 represent their corresponding target sequences. The ribozymes of

CC the invention are used for modulating the synthesis, expression and/or

CC stability of an mRNA encoding angiogenic factor, especially ARNT,

CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are

CC especially used to treat cancer, diabetic retinopathy, age related

CC macular degeneration (ARMD), inflammation, and arthritis, as well as

CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,

CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber

CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,

CC and other syndromes and diseases related to the levels of ARNT, Tie-2,

CC integrin subunit alpha-6, or integrin subunit beta-3

XX Sequence 17 BP; 5 A; 7 C; 3 G; 0 T; 2 U; 0 Other;

SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 76.5%; Pred. No. 5.9e+02;

Matches 13; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Oy 1052 CCCTGGCCCCCAACCCA 1068

Db 1 CCCTGGCCUGAACCACCA 17

RESULT 606

AA18977

ID AA18977 standard; RNA; 17 BP.

XX AA18977;

AC

XX 19-JUN-2000 (first entry)

DE

XX Human Tie-2 substrate sequence SEQ ID NO:2203.

DE

XX Human; aryl hydrocarbon nuclear transport; ARNT; Tie-2; angiogenesis;

KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;

KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;

KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;

KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;

KW age related macular degeneration; inflammation; neovascular glaucoma;

KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;

KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;

KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX

OS Homo sapiens.

XX

XX WO9950403-A2.

PN

XX 07-OCT-1999.

PD

XX 24-MAR-1999; 99WO-US006507.

XX

XX 27-MAR-1998; 98US-0079678P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

XX

XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;

XX

XX

Tue Mar 2 06:29:55 2004

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XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX PR WPI; 1999-591315/50.
XX DR Novel ribozymes for modulating the synthesis, expression and/or stability
XX PT of an mRNA encoding an angiogenic factors.
XX FS Claim 56; Page 129; 305pp; English.
XX CC The present invention describes enzymatic cleave RNA molecules with RNA
XX CC cleaving activity, which specifically cleave RNA encoded by an aryl
XX CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX CC AAA21596 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences
XX CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX CC AAA23422 represent their corresponding target sequences. The ribozymes of
XX CC the invention are used for modulating the synthesis, expression and/or
XX CC stability of an mRNA encoding angiogenic factor, especially ARNT,
XX CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX CC especially used to treat cancer, diabetic retinopathy, age related
XX CC macular degeneration (ARMD), inflammation, and arthritis, as well as
XX CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX CC angiobroma of tuberous sclerosis, pot-wine stains, Sturge Weber
XX CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX CC integrin subunit alpha-6, or integrin subunit beta-3
XX SQ Sequence 17 BP; 3 A; 7 C; 0 G; 0 T; 7 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 41.2%; Pred. No. 5.9e+02;
Matches 7; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

Qy 924 CTTTATCCTCCTCCTCT 940
Db 1 CAUUTUAUCCUACCU 17

RESULT 607
AAAL1180/c
ID AAA1180 standard; RNA; 17 BP.
XX AC AAA1180;
XX AC AAA1180;
XX DT 19-JUN-2000 (first entry)
XX DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:406.
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; Tie-2; angiogenesis;
XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX KW age related macular degeneration; inflammation; neovascular glaucoma;
XX KW myopic degeneration; psoriasis; verruca vulgaris; angiobroma;
XX KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
XX KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX OS Homo sapiens.
XX FN WO950403-A2.
XX XX

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PD 07-OCT-1999.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX PR WPI; 1999-591315/50.
XX DR Novel ribozymes for modulating the synthesis, expression and/or stability
XX PT of an mRNA encoding an angiogenic factors.
XX FS Claim 53; Page 63; 305pp; English.
XX CC The present invention describes enzymatic cleave RNA molecules with RNA
XX CC cleaving activity, which specifically cleave RNA encoded by an aryl
XX CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX CC AAA21596 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences
XX CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX CC AAA23422 represent their corresponding target sequences. The ribozymes of
XX CC the invention are used for modulating the synthesis, expression and/or
XX CC stability of an mRNA encoding angiogenic factor, especially ARNT,
XX CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX CC especially used to treat cancer, diabetic retinopathy, age related
XX CC macular degeneration (ARMD), inflammation, and arthritis, as well as
XX CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX CC angiobroma of tuberous sclerosis, pot-wine stains, Sturge Weber
XX CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX CC integrin subunit alpha-6, or integrin subunit beta-3
XX SQ Sequence 17 BP; 5 A; 2 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1126 TCACCTTCCTCCAG 1142
Db 17 TCCACCTTGAATCCAG 1

RESULT 608
AAAL20389/c
ID AAA20389 standard; RNA; 17 BP.
XX AC AAA20389;
XX AC AAA20389;
XX DT 19-JUN-2000 (first entry)
XX DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:3615.
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; Tie-2; angiogenesis;
XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX KW age related macular degeneration; inflammation; neovascular glaucoma;
XX KW myopic degeneration; psoriasis; verruca vulgaris; angiobroma;
XX KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
XX KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX KW

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XX OS Homo sapiens.
XX PN WO9849349-A1.
XX PD 05-NOV-1998.
XX PF 30-APR-1998; 98WO-US008800.
XX PR 30-APR-1997; 97US-00848840.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Ecker DJ, Cook PD, Monia BP, Freier SM, Sanghvi YS;
XX WPI; 1999-024070/02.
XX DR New oligonucleotides for inhibiting ras gene in mutant and activated form
XX PT - also used to detect ras genes.
XX PS Disclosure; Page 38; 118pp; English.
XX CC AAU84024-37 represent antisense phosphorothioate oligonucleotides
XX CC directed against human Ki-ras. The oligonucleotides are representative of
XX CC the invention, where each oligonucleotide has at least one portion
XX CC comprising at least one CH2-NH-O-CH2, CH2-O-N(CH3)-CH2, CH2-N(CH3)-N(CH3)
XX CC -CH2 or O-N(CH3)-CH2-CH2 linkage alternating with a phosphorothioate or
XX CC phosphodiester linkage. The oligonucleotides are used for the inhibition
XX CC of expression of the ras gene in both the normal and the activated form,
XX CC the latter of which has been implicated in tumour formation. They are
XX CC also used for the detection of the ras gene in cells and tissues and the
XX CC treatment of conditions arising from the activation of the ras gene i.e.
XX CC to inhibit the proliferation of cancer cells
XX SQ Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTCACTCCAGCTCCA 1147
DB 1 CTACGCCACCACTCCA 17

RESULT 610
AAU21627
ID AAU21627 standard; DNA; 17 BP.
XX AC
XX AC AAU21627;
XX DT
XX DT 14-MAY-1999 (first entry)
XX DE Human Ki-ras specific antisense oligo ISIS #6949.
XX KW Human; N-ras; inhibition; pharmaceutical; modulation; cancer; oncogene;
XX KW diagnostic; therapeutic; tumour; Ki-ras; antisense; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9902732-A1.
XX PD 21-JAN-1999.
XX PF 06-JUL-1998; 98WO-US013966.
XX PR 08+JUL-1997; 97US-00889296.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Cowser LM, Manoharan M;
XX WPI; 1999-120932/10.

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XX OS Homo sapiens.
XX PN WO9950403-A2.
XX PD 07-OCT-1999.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX WPI; 1999-591315/50.
XX DR Novel ribozymes for modulating the synthesis, expression and/or stability
XX PT of an mRNA encoding an angiogenic factors.
XX PS Claim 55; Page 142; 305pp; English.
XX CC The present invention describes enzymatic cleavage of nucleic acid molecules with RNA
XX CC cleaving activity, which specifically cleave RNA encoded by an aryl
XX CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAU16775 to
XX CC AAU17167 and AAU17561 to AAU17622 represent ribozyme sequences for ARNT,
XX CC and AAU1768 to AAU17560 and AAU17623 to AAU17684 represent their
XX CC corresponding target sequences; AAU17685 to AAU18385 and AAU19087 to
XX CC AAU19154 represent ribozyme sequences for Tie-2, and AAU18386 to AAU19086
XX CC and AAU19155 to AAU19222 represent their corresponding target sequences;
XX CC AAU19223 to AAU20361 and AAU21501 to AAU21595 represent ribozyme
XX CC sequences for integrin alpha 6 subunit, and AAU20362 to AAU21500 and
XX CC AAU21596 to AAU21688 represent their corresponding target sequences;
XX CC AAU21689 to AAU22475 and AAU22623 to AAU23342 represent ribozyme sequence
XX CC for integrin subunit beta 3, and AAU22476 to AAU23262, AAU23343 to
XX CC AAU23422 represent their corresponding target sequences. The ribozymes of
XX CC the invention are used for modulating the synthesis, expression and/or
XX CC stability of an mRNA encoding angiogenic factor, especially ARNT,
XX CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX CC especially used to treat cancer, diabetic retinopathy, age related
XX CC macular degeneration (ARMD), inflammation, and arthritis, as well as
XX CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
XX CC syndrome, Kippel-Trenauay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX CC integrin subunit alpha-6, or integrin subunit beta-3
XX SQ Sequence 17 BP; 0 A; 4 C; 8 G; 0 T; 5 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1286 GCGCCCAAGCCACAG 1302
DB 17 GCCCCACAGCAACAG 1

RESULT 609
AAU84031
ID AAU84031 standard; DNA; 17 BP.
XX AC
XX AC AAU84031;
XX DT
XX DT 05-MAR-1999 (first entry)
XX DE Antisense oligonucleotide 6949 directed against Ki-ras codon 12.
XX KW Antisense oligonucleotide; phosphorothioate; human H-ras;
XX KW tumour formation; cancer cell proliferation; ss.
XX OS Synthetic.

```

XX New oligonucleotide targeting human N-ras nucleic acid - is capable of
PT inhibiting human N-ras expression, useful for preventing or treating
PT conditions arising from the activation of a human N-ras oncogene.
XX
XX Disclosure; Page 35; 97pp; English.
XX
XX The invention relates to oligonucleotides, which target a nucleic acid
CC encoding human N-ras, and are capable of inhibiting human N-ras
CC expression. The antisense oligonucleotides form a pharmaceutical
CC composition, which is useful for modulating the expression of human N-
CC ras, inhibiting the proliferation of cancer cells, and preventing or
CC treating conditions arising from the activation of a human N-ras
CC oncogene. The oligonucleotides are also useful in diagnostics,
CC therapeutics, and as research reagents and kits. The oligonucleotides
CC enable the specific modulation of activated human N-ras expression, which
CC is associated with tumour formation. Sequences AAX21620-633 represent
CC antisense oligonucleotides complementary to human Ki-ras
XX
XX Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1131 CTTACCTCCAGCTCCA 1147
Db 1 CTACGCCACCACTCCA 17

RESULT 611
AAX56991
ID AAX56991 standard; DNA; 17 BP.
AC AAX56991;
XX
XX 16-JUL-1999 (first entry)
DT
DE Ras gene modulating liposomal entrapped oligonucleotide primer 35.
XX
XX Ras gene; modulator; liposome; primer; antisense; anticancer; inhibition;
KW cell growth inhibitor; treatment; cancer; ras protein; ss.
XX
XX Synthetic.
OS
XX WO922772-A1.
PN
XX 14-MAY-1999.
PD
XX
XX 28-OCT-1998; 98WO-US022821.
PF
XX 31-OCT-1997; 97US-00961469.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Hardee GE, Geary RS, Levin A, Templin MV, Howard R, Mehta RC;
PI
XX WPI; 1999-313181/26.
DR
XX Liposome-encapsulated oligonucleotides useful for treating or preventing
PT cancers associated with ras gene activation.
XX
XX Example 1; Page 113; 120pp; English.
XX
XX This invention describes novel compositions comprising oligonucleotides
CC (AAX56957-X57017), entrapped within liposomes, that hybridize
CC specifically to a target DNA or mRNA which encodes a mutant or wild-type
CC ras protein. The products of the invention have anticancer activity and
CC specifically bring about the antisense inhibition of ras genes or mRNA.
CC The products of the invention are used to modulate expression of a ras
CC gene in cells, tissue, organs or organisms, particularly to inhibit cell
CC growth and especially to treat or prevent cancers associated with
CC activation of a ras gene. Encapsulating the oligonucleotide reduces the

CC rate at which it is cleared from the blood when compared with non-
CC encapsulated material, and the oligonucleotides become distributed to
CC practically all parts of the body
XX
XX Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1131 CTTACCTCCAGCTCCA 1147
Db 1 CTACGCCACCACTCCA 17

RESULT 612
AAV92448/C
ID AAV92448 standard; RNA; 17 BP.
AC AAV92448;
XX
XX 18-FEB-1999 (first entry)
DT
DE Human A-Raf substrate position 607.
XX
XX Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW screening; identification; synthesis; deprotection; purification; cancer;
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW restenosis; rheumatoid arthritis; ss.
XX
XX Homo sapiens.
OS
XX WO9850530-A2.
PN
XX 12-NOV-1998.
PD
XX
XX 05-MAY-1998; 98WO-US009249.
PF
XX
XX 09-MAY-1997; 97US-0046059P.
PR
XX 09-JUN-1997; 97US-0049002P.
PR
XX 03-JUL-1997; 97US-0051718P.
PR
XX 22-AUG-1997; 97US-0056808P.
PR
XX 02-OCT-1997; 97US-0061321P.
PR
XX 02-OCT-1997; 97US-0061324P.
PR
XX 05-NOV-1997; 97US-0064866P.
PR
XX 19-DEC-1997; 97US-0068212P.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
PI Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;
PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX
XX WPI; 1999-009494/01.
DR
XX
XX Identifying new catalytic nucleic acid that modulates selected processes
PT - especially ribozymes that cleave Raf RNA for treating cancer,
PT restenosis, and also new ribozymes and modified nucleoside triphosphates
PT used as antiviral agents and synthons.
XX
XX Claim 177; Page 158; 259pp; English.
XX
XX A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases

CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
 CC ascites and infection. They may also be used to detect genetic drift and
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
 CC generally any condition associated with the level of c-raf. Introduction
 CC of sugar/phosphate modifications increases stability against nuclease and
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
 CC method, specifically for modulating the expression of a Raf gene
 XX Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02; Length 17;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1026 GGAGCTTGAAGGAACUA 1042

Db 17 GGCCTTGGGAGCA 1

RESULT 613

AAV93545

ID AAV93545 standard; RNA; 17 BP.

XX AC AAV93545;

XX DT 18-FEB-1999 (first entry)

XX Human B-raf substrate nucleotide position 1605.

XX Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;

XX target; substrate; catalyst; modulation; expression; Raf gene; delivery;

XX screening; identification; synthesis; deprotection; purification; cancer;

XX inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;

XX restenosis; rheumatoid arthritis; ss.

XX Homo sapiens.

XX WO9850530-A2.

XX 12-NOV-1998.

XX 05-MAY-1998; 98WO-US009249.

XX 09-MAY-1997; 97US-0046059P.

XX 09-JUN-1997; 97US-0049002P.

XX 03-JUL-1997; 97US-0051718P.

XX 22-AUG-1997; 97US-0056808P.

XX 02-OCT-1997; 97US-0061321P.

XX 02-OCT-1997; 97US-0061324P.

XX 05-NOV-1997; 97US-0064866P.

XX 19-DEC-1997; 97US-0068212P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;

XX Parry T, Beigelman L, Moswiggen JA, Karpeisky A, Burgin A;

XX Thompson J, Workman C, Beaudry A, Sweedler D;

XX WPI; 1999-009494/01.

XX Identifying new catalytic nucleic acid that modulates selected processes

XX - especially ribozymes that cleave Raf RNA for treating cancer,

XX restenosis, and also new ribozymes and modified nucleoside triphosphates

XX used as antiviral agents and synthons.

XX Claim 177; Page 169; 259pp; English.

XX A method has been developed for the identification of a nucleic acid

XX capable of modulating a process in a biological system. The method

XX comprises: (a) introducing into the system a random library of nucleic

XX acid catalysts (NAC) having a substrate binding domain (SBD), comprising

CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
 CC in systems where modulation has occurred and/or determining the sequence
 CC of at least part of the SBDs in such systems. Nucleic acid molecules with
 CC endonuclease activity and catalytic activity, from the present invention, to
 CC are used to modulate gene expression in plant and mammalian cells and to
 CC cleave target nucleic acid, particularly for treating systemic diseases
 CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
 CC ascites and infection. They may also be used to detect genetic drift and
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
 CC generally any condition associated with the level of c-raf. Introduction
 CC of sugar/phosphate modifications increases stability against nuclease and
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
 CC method, specifically for modulating the expression of a Raf gene
 XX Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 47.1%; Pred. No. 5.9e+02;

Matches 8; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

OY 933 CCTCCTCTTCATTGGTT 949

Db 1 CCTACTCUCUACUGGCGU 17

RESULT 614

AA14709

ID AAX14709 standard; DNA; 17 BP.

XX AC AAX14709;

XX 24-MAR-1999 (first entry)

XX Triple helix third strand of SOD1 gene nucleotides 1205-1218.

XX Triplex formation; DNA detection; triple helix; identification; bacteria;

XX oncogene; virus; ss.

XX Synthetic.

XX Homo sapiens.

XX US5861244-A.

XX 19-JAN-1999.

XX 22-DEC-1993; 93US-00173489.

XX 29-OCT-1992; 92US-00968436.

XX (PROF-) PROFILE DIAGNOSTIC SCI INC.

XX Hepburn AG, Wang C;

XX WPI; 1999-130384/11.

XX Assay of genetic sequences based on triplex formation from double
 XX stranded analyte - and hybrid of anchor and reporter sequences, with
 XX reporter released if triplex formation occurs, used e.g. to identify
 XX bacteria.

XX Disclosure; Col 17-18; 168pp; English.

XX The present sequence represents a polynucleotide that is able to form a
 XX triple helix with a double stranded sequence. Cytosine bases in the
 XX present can be replaced with 5-methylcytosine for increased triplex
 XX stability. The present sequence is used in the assay of the invention,
 XX where it can be part of the anchor DNA or reporter DNA sequence. The
 XX assay comprises adding a sample containing double-stranded DNA test
 XX sequences to an aqueous medium containing at least one complex of anchor
 XX DNA, attached to a solid support, and reporter DNA, where either a part
 XX of the anchor DNA or reporter DNA is designed to form a triple-strand

CC structure with part of the test sequence. Triplex formation results in
 CC displacement of the reporter DNA which is detected as an indication of
 CC the presence of the DNA test sequence. The method is used to detect DNA
 CC sequences, particularly for identification of bacteria (by detecting
 CC genes for ribosomal RNA) in clinical samples, but also detection of
 CC oncogenes and Hepatitis B virus
 XX
 SQ Sequence 17 BP; 0 A; 14 C; 1 G; 2 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1252 CCATCCCGACCCCT 1268
 ||| ||||| |||||
 Db 1 CCCCTCCCGCCCCCT 17
 RESULT 615
 AAX77963/C
 ID AAX77963 standard; DNA; 17 BP.
 AC AAX77963;
 DT 16-AUG-1999 (first entry)
 XX Human tenascin binding primer 39.
 DE
 XX Tenascin; antipsoriasis; antiviteligo; anticancer; anti-inflammatory;
 KW cardiovascular; treatment; disease; depigmentation; albinism; cancer;
 KW psoriasis; vitiligo; metastasis; melanoma; inflammation; restenosis;
 KW diagnosis; human; primer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH misc_difference 1..5
 FT /*tag= a
 FT /note= "nucleotides joined by phosphorothioate or
 FT phosphorodiester bonds"
 FT misc_difference 6..12
 FT /*tag= b
 FT /note= "nucleotides modified with 2'-O-Methyl, and/or 2'-
 FT O-Propyl and/or 2'-Methoxyethoxy and or a peptide nucleic
 FT acid backbone"
 FT misc_difference 13..16
 FT /*tag= c
 FT /note= "nucleotides joined by phosphorothioate or
 FT phosphorodiester bonds"
 FT
 FN DE19750702-Al.
 XX
 XX 27-MAY-1999.
 XX
 XX 15-NOV-1997; 97DE-01050702.
 XX
 XX 15-NOV-1997; 97DE-01050702.
 XX
 XX (HMRI) HOECHST MARION ROUSSEL DEUT GMBH.
 XX Peyman A, Uhlmann E, Weiser C;
 XX WPI; 1999-314075/27.
 XX
 XX Antisense oligonucleotides that bind to sequences encoding human tenascin
 XX for treating depigmentation, cancer, inflammation and cardiovascular
 XX disease.
 XX
 XX Claim 22; Page 16; 18pp; German.
 XX
 XX This invention describes novel oligonucleotides with up to 17 optionally
 CC modified nucleotides (nt), or their salts which are capable of binding to

CC a nucleic acid encoding an isoform of human tenascin, or a part of it.
 CC The oligonucleotides of the invention have antipsoriasis, antiviteligo,
 CC anticancer, anti-inflammatory and cardiovascular activity. The
 CC oligonucleotides are used to treat or prevent diseases associated with
 CC (over)expression of tenascin, particularly depigmentation (albinism,
 CC psoriasis or vitiligo), cancer or metastases, particularly melanoma,
 CC inflammation or cardiovascular disease (e.g. restenosis). A preferred
 CC application is treatment of vitiligo. The oligonucleotides may also be
 CC used for diagnosis of these diseases. AAX77925-X77981 represent the
 CC primers used in the method of the invention
 XX
 SQ Sequence 17 BP; 1 A; 0 C; 11 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1139 CCAGCTCCACCTATACC 1155
 ||| ||||| |||||
 Db 17 CCACCTCCACCAACC 1
 RESULT 616
 AAX77925/C
 ID AAX77925 standard; DNA; 17 BP.
 XX
 AC AAX77925;
 XX
 DT 16-AUG-1999 (first entry)
 XX Human tenascin binding primer 1.
 DE
 XX Tenascin; antipsoriasis; antiviteligo; anticancer; anti-inflammatory;
 KW cardiovascular; treatment; disease; depigmentation; albinism; cancer;
 KW psoriasis; vitiligo; metastasis; melanoma; inflammation; restenosis;
 KW diagnosis; human; primer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX
 XX DE19750702-Al.
 XX 27-MAY-1999.
 XX 15-NOV-1997; 97DE-01050702.
 XX
 XX 15-NOV-1997; 97DE-01050702.
 XX
 XX (HMRI) HOECHST MARION ROUSSEL DEUT GMBH.
 XX Peyman A, Uhlmann E, Weiser C;
 XX WPI; 1999-314075/27.
 XX
 XX Antisense oligonucleotides that bind to sequences encoding human tenascin
 XX for treating depigmentation, cancer, inflammation and cardiovascular
 XX disease.
 XX
 XX Claim 7; Page 15; 18pp; German.
 XX
 XX This invention describes novel oligonucleotides with up to 17 optionally
 CC modified nucleotides (nt), or their salts which are capable of binding to
 CC a nucleic acid encoding an isoform of human tenascin, or a part of it.
 CC The oligonucleotides of the invention have antipsoriasis, antiviteligo,
 CC anticancer, anti-inflammatory and cardiovascular activity. The
 CC oligonucleotides are used to treat or prevent diseases associated with
 CC (over)expression of tenascin, particularly depigmentation (albinism,
 CC psoriasis or vitiligo), cancer or metastases, particularly melanoma,
 CC inflammation or cardiovascular disease (e.g. restenosis). A preferred
 CC application is treatment of vitiligo. The oligonucleotides may also be
 CC used for diagnosis of these diseases. AAX77925-X77981 represent the
 CC primers used in the method of the invention
 XX

SQ Sequence 17 BP; 1 A; 0 C; 11 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1139 CCAGCTCCACTATACC 1155
DB 17 CCACCTCCACCAACC 1
RESULT 617
AAX77944/C
ID AAX77944 standard; DNA; 17 BP.
AC AAX77944;
XX
DT 16-AUG-1999 (first entry)
XX
DE Human tenascin binding primer 20.
XX
KW Tenascin; antiprosiasis; antiviteligo; anticancer; anti-inflammatory;
KW cardiovascular; treatment; disease; depigmentation; albinism; cancer;
KW psoriasis; vitiligo; metastasis; melanoma; inflammation; restenosis;
KW diagnosis; human; primer; ss.
XX Synthetic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
PH misc_difference 1. 4
FT /tag= a
FT /note= "Nucleotides joined by phosphodiester or
FT phosphorothioate linkages"
FT misc_difference 9
FT /tag= b
FT /note= "Nucleotide joined to others by phosphodiester or
FT phosphorothioate linkages"
FT modified_base 14. 16
FT /tag= c
FT /note= "Nucleotides joined by phosphodiester or
FT phosphorothioate linkages"
XX
XX DE19750702-A1.
XX
XX 27-MAY-1999.
XX
XX 15-NOV-1997; 97DE-01050702.
XX
XX 15-NOV-1997; 97DE-01050702.
XX (HMRI) HOECHST MARION ROUSSEL DEUT GMBH.
XX Peyman A, Uhlmann E, Weiser C;
XX WPI; 1999-314075/27.
XX
XX Antisense oligonucleotides that bind to sequences encoding human tenascin
PT for treating depigmentation, cancer, inflammation and cardiovascular
PT disease.
XX
XX Claim 20; Page 16; 18pp; German.
XX
XX This invention describes novel oligonucleotides with up to 17 optionally
CC modified nucleotides (nt), or their salts which are capable of binding to
CC a nucleic acid encoding an isoform of human tenascin, or a part of it.
CC The oligonucleotides of the invention have antiprosiasis, antiviteligo,
CC anticancer, anti-inflammatory and cardiovascular activity. The
CC oligonucleotides are used to treat or prevent diseases associated with
CC (over)expression of tenascin, particularly depigmentation (albinism,
CC psoriasis or vitiligo), cancer or metastases, particularly melanoma,
CC inflammation or cardiovascular disease (e.g. restenosis). A preferred
CC application is treatment of vitiligo. The oligonucleotides may also be

CC used for diagnosis of these diseases. AAX77925-X77981 represent the
CC primers used in the method of the invention
XX
SQ Sequence 17 BP; 1 A; 0 C; 11 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1139 CCAGCTCCACTATACC 1155
DB 17 CCACCTCCACCAACC 1
RESULT 618
AAA36202/C
ID AAA36202 standard; DNA; 17 BP.
XX
XX AAA36202;
AC
XX
DT 26-JUL-2000 (first entry)
XX
DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:259.
XX
KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
KW genomic classification; identification; DNA fingerprinting;
KW tumour characterisation; hybridisation; ss.
XX
XX Homo sapiens.
XX
XX WO200018960-A2.
PN
XX
XX 06-APR-2000.
PD
XX
XX 24-SEP-1999; 99WO-US022283.
PF
XX
XX 25-SEP-1998; 98US-0101757P.
PR
XX (MASI) MASSACHUSETTS INST TECHNOLOGY.
PA
XX Landers JE, Jordan B, Housman DE, Charest A;
PI
XX WPI; 2000-293181/25.
DR
XX
XX Detection of single nucleotide polymorphisms in genomes by preparation
PT and analysis of reduced complexity genomes, useful for genotyping,
PT fingerprinting and determining allele frequency of SNPs.
XX
XX Disclosure; Page 61; 11pp; English.
XX
XX A method has been developed for detecting the presence or absence of a
CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
CC method comprises preparing a reduced complexity genome (RCG) from the
CC genomic sample and analysing the RCG for the presence or absence of a SNP
CC allele. The method can be used to characterise a tumour, to generate a
CC genomic pattern for an individual genome or to generate a genomic
CC classification code for a genome. The method can be used to assess
CC whether a subject is at risk for developing a disease or to identify a
CC set of SNP alleles associated with a disease. The method can also be used
CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
CC used in the exemplification of the present invention. AAA35948 to
CC AAA36632 represent nucleotide sequences containing SNPs
XX
SQ Sequence 17 BP; 8 A; 3 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 936 CCTCTTCATTGGTTTAA 952
DB 17 CCTCCTTATTGGTTTGA 1

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RESULT 619
AAZ60922/c
ID AAA95865 standard; DNA; 17 BP.
AC AAA95865;
DT 18-JAN-2001 (first entry)
DE Human Ki-ras antisense oligonucleotide ISIS #6949.
KW Human; antisense oligonucleotide; ras; H-ras; Ki-ras; N-ras; cytostatic;
KW phosphorothioate; cancer; ss.
OS Homo sapiens.
XX US6117848-A.
PN 12-SEP-2000.
PD 03-AUG-1998; 98US-00128494.
PF 05-OCT-1992; 92US-00958134.
PR 21-JAN-1993; 93US-00007996.
PR 01-OCT-1993; 93WO-US009346.
PR 03-APR-1995; 95US-00411734.
XX (ISIS-) ISIS PHARM INC.
PA Manoharan M, Cowseert LM, Monia BP;
XX WPI; 2000-610851/58.
XX Oligonucleotides targeted to human H-ras or human Ki-ras coding
XX sequences, useful for treating and preventing cancer.
XX Disclosure; Col 20; 41pp; English.
XX
CC The present sequence was used in methods for the modulation of ras
CC expression. Antisense oligonucleotides were designed to specifically
CC target mRNA encoding human H-ras, Ki-ras and N-ras. The oligonucleotides
CC can be used to inhibit the proliferation of cancer cells and to prevent
CC or treat a condition arising from the activation of a ras oncogene. They
CC may also be used to modulate the expression of human H-ras or human Ki-
CC ras. The antisense oligonucleotides may contain modified backbones,
CC substituted sugar moieties and modified bases. The sequences preferably
CC have a phosphorothioate backbone. They are preferably
CC oligodeoxynucleotides or chimeric oligonucleotides containing 2'-O-methyl
CC ends and a central deoxy gap
XX
SQ Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTCCACCTCCAGCTCCA 1147
DB 1 CTAGGCCACCGCTCCA 17

RESULT 620
AAZ60922/c
ID AAZ60922 standard; DNA; 17 BP.
AC AAZ60922;
XX 30-MAY-2000 (first entry)
DT PCR primer used to amplify murine delta-related protein cDNA.
DE Cell development cycle; Delta family; membrane surface-bound ligand;
KW

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KW endothelial cell biology; gene therapy; subcortical infarct;
KW cerebral autosomal dominant atariopathy; leucoencephalopathy;
XX ischemic stroke; PCR primer; ss.
OS Mus sp.
XX WO200006726-A2.
XX 10-FEB-2000.
XX
PF 12-JUL-1999; 99WO-US015710.
XX
PR 27-JUL-1998; 98US-00123168.
XX (AMGE-) AMGEN INC.
XX
PI Shutter JR, Stark KL;
XX WPI; 2000-195294/17.
XX
CC Cell development cycle protein of delta family useful for treating
CC various disorders associated with central nervous system e.g. cerebral
CC autosomal dominant atariopathy and ischemic strokes.
XX Example 4; Page 54; 171pp; English.
XX
CC PCR primers AAZ60922-23 were used to amplify cDNA encoding a murine
CC polypeptide, which a member of the cell development cycle protein family
CC known as the Delta family of mammalian membrane surface-bound ligands.
CC The gene is expressed within vascular endothelium indicates a role for
CC the polypeptides in the control of endothelial cell biology. The murine
CC polynucleotide was identified from a white adipose tissue cDNA library.
CC The polypeptide is useful for identifying receptors, which bind to and/or
CC are activated by the polypeptide. The polynucleotide is useful in gene
CC therapy of cerebral autosomal dominant atariopathy with subcortical
CC infarcts and leucoencephalopathy, an autosomal dominant disorder causing
CC ischemic strokes
XX
SQ Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 753 CACCTGCCATGCAGGTT 769
DB 17 CATCTGCCGTCCAGGTT 1

RESULT 621
AAZ14476
ID AAA14476 standard; DNA; 17 BP.
XX
XX AAA14476;
XX 21-AUG-2000 (first entry)
DT PCR primer, SEQ ID NO:2.
XX
XX Oligonucleotide tag repertoire; oligonucleotide word;
XX enzymatic synthesis; cleavage; ligation; amplification;
XX DNA identification; PCR primer; ss.
XX Synthetic.
XX WO200020639-A1.
XX
XX 13-APR-2000.
XX
XX 28-SEP-1999; 99WO-US022585.
XX
XX 05-OCT-1998; 98US-0103030P.
XX

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CC erythropoietin, granulocyte colony stimulating factor protein and
XX interferon alpha
SQ Sequence 17 BP; 1 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match      0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1170 CAACCTTGGCGCTCC 1186
    ||||| ||||| |||||
Db 1 CACCTTTTCGGCTTCC 17

RESULT 624
AAAF02098/c
ID AAF02098 standard; DNA; 17 BP.
XX
AC AAF02098;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #393.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
PS Claim 37; Page 64; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 5 A; 5 C; 6 G; 1 T; 0 U; 0 Other;

Query Match      0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1154 CCCCCTGGTCACTGTCC 1170
    ||||| ||||| |||||
Db 17 CCGCGGTGATGTCTC 1

RESULT 625
AAAF07059/c
ID AAF07059 standard; DNA; 17 BP.
XX

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AC AAF07059;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #3316.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
PS Claim 54; Page 132; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 1 A; 11 C; 1 G; 4 T; 0 U; 0 Other;

Query Match      0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGGGGAG 1029
    ||||| ||||| |||||
Db 17 CTGAGAGAGGGGGGG 1

RESULT 626
AAAF01964
ID AAF01964 standard; DNA; 17 BP.
XX
AC AAF01964;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #259.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.

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XX (RIBO-) RIBOZYME PHARM INC.
 XX Blatt L, Zwick M, Pavco P, Meswiggen J;
 XX WPI; 2000-647423/62.
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 XX Claim 37; Page 61; 164pp; English.
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX Sequence 17 BP; 3 A; 9 C; 1 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1137 CTCGAGCTCCACCTATA 1153
 DB 1 CTCGAGCTCCACCTA 17
 RESULT 627
 AAF01742/c
 ID AAF01742 standard; DNA; 17 BP.
 XX AAF01742;
 XX 16-FEB-2001 (first entry)
 XX Hammerhead ribozyme substrate #37.
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX Homo sapiens.
 XX WO200061729-A2.
 XX 19-OCT-2000.
 XX 11-APR-2000; 2000WO-US009721.
 XX 12-APR-1999; 99US-0129390P.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX Blatt L, Zwick M, Pavco P, Meswiggen J;
 XX WPI; 2000-647423/62.
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 XX Claim 37; Page 56; 164pp; English.
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and

CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1009 ACACCTGAAAAGAGGG 1025
 DB 17 ACACCTGAAAAGACTGG 1
 RESULT 628
 AAF02604
 ID AAF02604 standard; DNA; 17 BP.
 XX AAF02604;
 XX 16-FEB-2001 (first entry)
 XX Hammerhead ribozyme substrate #899.
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX Homo sapiens.
 XX WO200061729-A2.
 XX 19-OCT-2000.
 XX 11-APR-2000; 2000WO-US009721.
 XX 12-APR-1999; 99US-0129390P.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX Blatt L, Zwick M, Pavco P, Meswiggen J;
 XX WPI; 2000-647423/62.
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 XX Claim 37; Page 76; 164pp; English.
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX Sequence 17 BP; 3 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 787 GAGTGTGTCTCTCTGTAG 803
 DB 1 GAGTGTGTCAACTGTGG 17
 RESULT 629
 AAF07190
 ID AAF07190 standard; DNA; 17 BP.

CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX
 SQ Sequence 17 BP; 9 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1034 AAGAACTACTACTAAG 1050
 ||| ||||| |||
 Db 1 AAGAACTACTGCAAG 17

RESULT 632

AAF01929

ID AAF01929 standard; DNA; 17 BP.

XX AC AAF01929;

XX DT 16-FEB-2001 (first entry)

XX DE Hammerhead ribozyme substrate #224.

XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.

XX OS Homo sapiens.

XX PN WO200061729-A2.

XX PD 19-OCT-2000.

XX PF 11-APR-2000; 2000WO-US009721.

XX PR 12-APR-1999; 99US-0129390P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;

XX DR WPI; 2000-647423/62.

XX PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.

XX PS Claim 37; Page 61; 164pp; English.

XX CC The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX

SQ Sequence 17 BP; 1 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1169 CCACCTTTTCGGCTCC 1185
 ||| ||||| ||||| |||
 Db 1 CCACCTTTTCGGCTCC 17

RESULT 633

AAF06045/c

ID AAF06045 standard; DNA; 17 BP.
 XX AC AAF06045;

XX DT 16-FEB-2001 (first entry)

XX DE Hammerhead ribozyme substrate #2842.

XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.

XX OS Homo sapiens.

XX PN WO200061729-A2.

XX PD 19-OCT-2000.

XX PF 11-APR-2000; 2000WO-US009721.

XX PR 12-APR-1999; 99US-0129390P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;

XX DR WPI; 2000-647423/62.

XX PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.

XX PS Claim 42; Page 121; 164pp; English.

XX CC The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX

SQ Sequence 17 BP; 3 A; 2 C; 7 G; 0 T; 5 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1040 CTACTACTAAGCCCTG 1056
 ||| ||||| ||||| |||
 Db 17 CCATTACTAAGCCCTG 1

RESULT 634

AAF07060/c

ID AAF07060 standard; DNA; 17 BP.

XX AC AAF07060;

XX DT 16-FEB-2001 (first entry)

XX DE Hammerhead ribozyme substrate #3317.

XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.

XX OS Homo sapiens.

XX PN WO200061729-A2.

XX PD 19-OCT-2000.

XX PF 11-APR-2000; 2000WO-US009721.

XX PR 12-APR-1999; 99US-0129390P.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
 XX DR WPI; 2000-647423/62.
 XX
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 XX
 XX Claim 54; Page 132; 164pp; English.
 XX
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX
 XX Sequence 17 BP; 1 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1010 CACCTGAAAGAGGGG 1026
 |||||
 17 CAACCTGAGAGGAGGGG 1

Db

RESULT 635
 AAF07118
 ID AAF07118 standard; DNA; 17 BP.
 XX AC AAF07118;
 XX
 XX 16-FEB-2001 (first entry)
 XX
 XX Hammerhead ribozyme substrate #3375.
 XX
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 KW
 OS Homo sapiens.
 XX
 XX WO200061729-A2.
 XX
 XX 19-OCT-2000.
 XX
 XX 11-APR-2000; 2000WO-US003721.
 XX
 XX 12-APR-1999; 99US-0129390P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Blatt L, Zwick M, Pavco P, Mcswiggen J;
 XX WPI; 2000-647423/62.
 XX
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 XX
 XX Claim 54; Page 133; 164pp; English.
 XX
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription

CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX
 XX Sequence 17 BP; 2 A; 11 C; 3 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1249 GACCCCATCCCCAACCC 1265
 |||||
 1 GGCCCCATCCCCAGCC 17

Db

RESULT 636
 AAA70569/c
 ID AAA70569 standard; DNA; 17 BP.
 XX AC AAA70569;
 XX
 XX 06-DEC-2000 (first entry)
 XX
 XX Shear Stress Response Element from PGDF-A gene.
 DE
 XX
 XX Cytostatic; cardiant; vasotropic; vulnary; antidiabetic; hypotensive;
 KW antihtherosclerotic; antilipemic; gene therapy; vector; SSRE; promoter;
 KW Shear Stress Response Element; antisense; ribozyme; repressor antibody;
 KW platelet derived growth factor A; PDGF-A; angiogenesis; ischaemia;
 KW cardiovascular disorder; neoplastic disorder; atherosclerosis; ss;
 KW hypertension; diabetes; hypercholesterolaemia; wound healing.
 KW
 OS Homo sapiens.
 XX
 XX WO200039275-A2.
 XX
 XX 06-JUL-2000.
 XX
 XX 23-DEC-1999; 99WO-IL000702.
 XX
 XX 24-DEC-1998; 98US-00220510.
 XX
 XX 24-DEC-1998; 98US-0113863P.
 XX
 XX (FLOR-) FLORENCE MEDICAL LTD.
 XX
 XX Resnick N;
 XX
 XX WPI; 2000-452382/39.
 XX
 XX Expression vector comprising multiple shear stress response elements,
 PT useful for modulating endothelial cell proliferation, stimulating or down
 PT -regulating angiogenesis and treating vasculogenic/angiogenic disorders.
 XX
 XX Example 1; Page 45; 61pp; English.
 XX
 XX The invention relates to the construction of a vector which comprises a
 CC multiple number of Shear Stress Response Elements (SSRE) from various
 CC gene promoter sequences and one or more genes, antisense molecules,
 CC ribozymes, double stranded RNA, or a nucleic acid which encodes a
 CC repressor antibody or a mutant protein which inhibits the synthesis of,
 CC or activity of the protein or peptide. This sequence represents the SSRE
 CC sequence from the promoter of the platelet-derived growth factor A (PDGF-
 CC A). The vector is useful for stimulating or inhibiting vascular
 CC endothelial cell or capillary endothelial cell proliferation and for
 CC stimulating angiogenesis in cells. The vector or gene of interest is
 CC useful for modulating vascular permeability in a mammal, for stimulating
 CC or inhibiting the formation, maturation or regression of blood vessels,
 CC modulating genes or proteins involved in a diseases, down regulating
 CC angiogenesis and for treating vasculogenic and/or angiogenic disorders.
 CC These disorders include cardiovascular disorder, neoplastic disorders,
 CC ischaemia, atherosclerosis, hypertension, diabetes, hypercholesterolaemia

```

CC and wound healing
XX
SQ Sequence 17 BP; 0 A; 2 C; 15 G; 0 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1238 CCTCGCCTCGACCC 1254
DB 17 CCOCGCCCGGCC 1
RESULT 637
ABK03092
ID ABK03092 standard; RNA; 17 BP.
AC ABK03092;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Inozyme #43.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX WPI; 2001-607195/69.
XX
Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
constructs, which down regulate expression of a CD20 gene or neurite
growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
central nervous system injury.
XX
Claim 30; Page 146; 200pp; English.
XX
The invention relates to a nucleic acid molecule which down regulates
expression of a CD20 gene and a nucleic acid molecule which down
regulates expression of a neurite growth inhibitor gene (NOGO). The
nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
DNAzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA
with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

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CC of CD20 in the presence of a divalent cation that is preferably Mg2+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targeting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg2+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 6 A; 7 C; 1 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e+02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
QY 1060 CCAAAACCCAGCTCAG 1076
DB 1 CCAAAACCCAGCTCAG 17

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RESULT 638
ABK01807/c
ID ABK01807 standard; RNA; 17 BP.
XX
AC ABK01807;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Zinczyme #129.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.

```

PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX Blatt L, Mcswiggen J, Chowrira BM;
 XX WPI; 2001-607195/69.
 XX
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX
 XX Claim 88; Page 98; 200pp; English.
 XX
 XX The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinkzyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is a zinkzyme molecule of the invention
 XX
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1128 CACCTTCACCTCCAGCT 1144
 Db 17 CTCACGACCTCCAGCT 1
 RESULT 639
 ABA80784
 ID ABA80784 standard; DNA; 17 BP.
 AC ABA80784;
 XX
 XX 24-JAN-2002 (first entry)
 DT
 XX LDLR mutation correcting oligonucleotide SEQ ID NO: 3630.
 DE
 XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
 KW
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
 KW Alzheimer's disease; cytostatic; anticisickling; antianaemic; haemostatic;
 KW antilipemic; ss.
 XX Homo sapiens.
 XX OS
 XX PN WO200173002-A2.
 XX PD 04-OCT-2001.
 XX 27-MAR-2001; 2001WO-US0009761.
 XX 27-MAR-2000; 2000US-0192176P.
 PR 27-MAR-2000; 2000US-0192179P.
 PR 01-JUN-2000; 2000US-0208538P.
 PR 30-OCT-2000; 2000US-0244989P.
 XX (UYDE) UNIV DELAWARE.
 PA Kmiec EB, Gampfer HB, Rice MC;
 XX WPI; 2001-639230/73.
 XX
 XX Oligonucleotide for targeted alterations of genetic sequences and for
 PT treating cystic fibrosis, comprises at least one mismatch and chemical
 PT modification.
 XX
 XX Claim 7; Page 242; 294pp; English.
 XX
 XX The present invention provides single-stranded oligonucleotides which can
 CC be used for the targeted alteration of genomic sequences, where the
 CC oligonucleotide has at least one mismatch compared with the genomic
 CC sequence to be altered. In particular, these sequences are directed at
 CC the following genes: adenosine deaminase, p53, beta-globin,
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
 CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
 CC various syndromes. The present sequence is one of the gene correcting
 CC oligonucleotides of the invention
 XX
 SQ Sequence 17 BP; 2 A; 10 C; 2 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1142 GCTCCACCTATACCCCC 1158
 Db 1 GCTCCACCTGCATCCCC 17
 RESULT 640
 ABA80785/C
 ID ABA80785 standard; DNA; 17 BP.
 AC ABA80785;
 XX
 XX 24-JAN-2002 (first entry)
 DT
 XX LDLR mutation correcting oligonucleotide SEQ ID NO: 3631.
 DE
 XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
 KW

KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
 KW familial hypercholesterolaemia; UGRI; syndrome; APP; PSEN1; antisense;
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
 KW Alzheimer's disease; cytostatic; antischlicking; antianaemic; haemostatic;
 KW antilipemic; ss.

OS Homo sapiens.

PN WO200173002-A2.

XX 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

PR 27-MAR-2000; 2000US-0192179P.

PR 01-JUN-2000; 2000US-0208538P.

PR 30-OCT-2000; 2000US-0244989P.

XX (UYDE) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC;

XX WPI; 2001-639230/73.

XX Oligonucleotide for targeted alterations of genetic sequences and for
 PT treating cystic fibrosis, comprises at least one mismatch and chemical
 PT modification.

PS Claim 7; Page 242; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can
 CC be used for the targeted alteration of genomic sequences, where the
 CC oligonucleotide has at least one mismatch compared with the genomic
 CC sequence to be altered. In particular, these sequences are directed at
 CC the following genes: adenosine deaminase, p53, beta-globin,
 CC retinoblastoma, BRCA1, BRCA2, CTR, cyclin-dependent kinase inhibitor 2A
 CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
 CC (UGT1), amyloid precursor protein (APP), presenilin-1 (PSEN1) and
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
 CC various syndromes. The present sequence is one of the gene correcting
 CC oligonucleotides of the invention

XX Sequence 17 BP; 3 A; 2 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1142 GGTCCACCTATACCCCC 1158

DB 17 GGTCCACCTGATCCCC 1

RESULT 641

AAC91135/c

XX AAC91135 standard; DNA; 17 BP.

XX AAC91135;

XX 20-MAR-2001 (first entry)

XX Fungal pathogenic species identification probe #21.

XX Fungal pathogenic; Internal Transcribed Spacer; ITS;

XX Opportunistic infection; ss.

XX Unidentified.

XX WO200073499-A2.

PN 07-DEC-2000.

XX 24-MAY-2000; 2000WO-EP004714.

XX 28-MAY-1999; 99EP-00870109.

PR 11-JUN-1999; 99US-0138621P.

XX (INNO-) INNOGENETICS NV.

PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.

XX Smith T, Maher M, Martin C, James G, Rossau R, Van Der Weide M;

PI WPI; 2001-061555/07.

XX Detecting and identifying fungal pathogens, especially Candida,

PT Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic

PT acid of the fungal pathogen with a probe from the internal transcribed

PT spacer region of a DNA.

XX Claim 1; Page 46; 59pp; English.

XX The present invention relates to detecting and identifying fungal

CC pathogenic species in a sample. The method involves hybridizing a nucleic

CC acid of a fungal pathogen possibly present in the sample with at least

CC one oligonucleotide probe, from an Internal Transcribed Spacer (ITS)

CC region. The method is useful for simultaneous detection and

CC differentiation of clinically important fungi in a single assay,

CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,

CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.

CC versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis

CC carinii. The method is especially useful in the detection of

CC opportunistic infections in patients with impaired immunity systems, such

CC as organ transplant patients, patients receiving intensive anticancer

CC treatments, diabetics or AIDS patients

XX Sequence 17 BP; 1 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1179 GACTCCCCCAGAGG 1195

DB 17 GACTCCCCCAGAGG 1

RESULT 642

AAH48172/c

ID AAH48172 standard; DNA; 17 BP.

XX AAH48172;

XX 20-SEP-2001 (first entry)

XX Human TNF-308 allele 1 probe.

XX Asthma; polymorphism; major histocompatibility complex; MHC; probe;

KW chromosome 6p; human; tumour necrosis factor; TNF; ss.

XX Homo sapiens.

XX US2001007741-A1.

XX 12-JUL-2001.

XX 10-APR-1998; 98US-00058165.

XX 11-APR-1997; 97US-0043856P.

XX (COOK/) COOKSON W O C M.

PA (MOFF/) MOFFATT M F.
 XX Cookson WOCM, Moffatt MF;
 XX WPI; 2001-432309/46.
 DR
 XX Diagnosing or prognosing an individual as being asthmatic by detecting
 PT for the presence of an unusual variant form, which is associated with
 PT increased tumor necrosis factor secretion, of a polymorphic sequence in
 PT chromosome 6p MHC region.
 XX
 XX Example; Page 3; 8pp; English.
 XX
 CC The present invention relates to a method for diagnosing or prognosing an
 CC individual as being asthmatic, or as having a predisposition to asthma.
 CC The method comprises demonstrating in the individual the presence of an
 CC unusual variant form of at least one polymorphic sequence in the major
 CC histocompatibility complex (MHC) region of chromosome 6p, where the
 CC unusual variant form is associated with an increased secretion of tumour
 CC necrosis factor (TNF). The method is also useful for predicting the
 CC clinical course of asthma, both in individuals and across populations.
 CC This may be used to identify asthmatic individuals who may respond to
 CC treatment directed against TNF or other pro-inflammatory molecules which
 CC interact with TNF. The present sequence is a probe for TNF-308 allele 1.
 CC This probe was used to illustrate the present invention
 XX
 XX Sequence 17 BP; 3 A; 2 C; 11 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1252 CCATCCGCCAACCCCT 1268
 ||| ||||| |||||
 Db 17 CCGGTCGCCATGCCCT 1

RESULT 643
 AAF54961/C
 ID AAF54961 standard; DNA; 17 BP.
 XX
 AC AAF54961;
 DT 15-MAY-2001 (first entry)
 XX
 DE 5' primer used to amplify coat protein sequences of CGMMV isolates.
 XX
 KW Replicase; CGMMV; CGMMV infection; transgenic plant; Cucurbitaceae;
 KW PCR primer; ss.
 XX
 OS Cucurbit green mottle mosaic virus.
 XX
 PN WO200109300-A2.
 XX
 PD 08-FEB-2001.
 XX
 XX 27-JUL-2000; 2000WO-NL000534.
 XX
 PR 02-AUG-1999; 99EP-00202540.
 XX
 PA (KEYG-) KEYGENE NV.
 XX
 PI Flerens-Onstenk BGJ, De Both MTJ;
 DR WPI; 2001-159863/16.
 XX
 CC Generating plants resistant to cucumber green mottle mosaic virus
 PT infection, comprises transforming a plant with a polynucleotide that when
 PT expressed produces resistance against infection and does not produce
 PT replicase activity.
 XX
 XX Example 1; Page 20; 88pp; English.
 PS
 XX

CC PCR primers AAF54960-63 were used to amplify DNA encoding the coat
 CC proteins of cucumber green mottle mosaic virus (CGMMV) isolates. The
 CC amplified sequence was used to produce a DNA construct which, upon
 CC transformation into a plant and transcription into RNA, generates
 CC resistance against infection with CGMMV in the plant, and does not lead
 CC to generation of any replicase activity in the plant. The method is
 CC useful for protecting plants susceptible to CGMMV infection and for
 CC generating resistant plants against CGMMV, particularly those plants of
 CC the Cucurbitaceae family
 XX
 XX Sequence 17 BP; 0 A; 1 C; 9 G; 7 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1290 CCACAGCCACAGAGCC 1306
 ||||| ||||| |||||
 Db 17 CCACAAACCCACACGCC 1

RESULT 644
 AAF83170
 ID AAF83170 standard; DNA; 17 BP.
 XX
 AC AAF83170;
 DT 09-JUL-2001 (first entry)
 XX
 DE Probe PN(n)G used in detection by allele specific extension.
 XX
 KW Immobilisation; chemical; biological; polynucleotide amplification;
 KW nucleic acid detection; probe; hybridisation; PCR primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO200127327-A2.
 XX
 PD 19-APR-2001.
 XX
 PF 06-OCT-2000; 2000WO-US027872.
 XX
 PR 08-OCT-1999; 99US-0158315P.
 XX
 PA (PROT-) PROTOGENE LAB INC.
 XX
 PI Brennan TM, Chatelain F, Berninger M;
 XX
 DR WPI; 2001-290733/30.
 XX
 XX Apparatus and method for performing a large number of chemical and
 PT biological reactions by bringing two arrays into close apposition and
 PT allowing reactants on the surfaces of the two arrays to come into
 PT contact.
 XX
 XX Example 11; Fig 18B; 112pp; English.
 PS
 XX The invention provides a novel system for performing reactions, that
 CC comprises a first solid support with a reactant of each reaction
 CC immobilized on to it, and a second solid support either providing a
 CC second reactant confined to a specific area on the surface, or a chemical
 CC /mechanical separation of the reactions, where the first and second solid
 CC supports are assembled to provide an environment for performing the
 CC reactions in parallel. The methods and apparatus are useful for
 CC performing a large number of chemical and biological reactions,
 CC especially polynucleotide amplification reactions and the detection of
 CC sequence variations, expression levels and their functions. The method is
 CC capable of generating large amounts of data or products per unit time by
 CC carrying out large numbers of reactions in parallel. The process is also
 CC amenable to full automation. Sequences AAF83164-179 represent probes used
 CC in detecting amplified products by allele specific extension, the
 CC products amplified by performing large numbers of PCR reactions using
 CC array-immobilised and releasable primers

```
XX SQ Sequence 17 BP; 5 A; 9 C; 3 G; 0 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1288 GCCCAAGCCACAGAG 1304
||||| ||||| |||||
Db 1 GCCCAAGCCACAGAG 17
RESULT 645
ABS64064/c
ID ABS64064 standard; DNA; 17 BP.
XX AC ABS64064;
XX DT 15-NOV-2002 (first entry)
XX DE CCMV RT-PCR primer 97G02.
XX KW CCMV; ss; RT-PCR; melon; cucumber; watermelon; bottlegourd; replicase;
XX KW CCMV resistance; plant; transgenic; coat protein; primer; PCR;
XX reverse transcriptase PCR.
XX OS Cucumber green mottle mosaic virus.
XX WO200263019-A2.
PD 15-AUG-2002.
XX PF 08-FEB-2002; 2002WO-NL000088.
XX PR 08-FEB-2001; 2001EP-00200448.
XX PA (KEYG-) KEYGENE NV.
XX PI Onstenk EV FirenseBGJ, De Both MTJ;
XX WPI; 2002-643418/69.
Generating resistance in Cucurbitaceae species, against infection with
Cucumber Green Mottle Mosaic Virus (CGMMV) comprises using a nucleotide
that encodes a defective variant of the replicase of CGMMV.
Example 1; Page 33; 127pp; English.
The invention relates to generating resistance in a plant or plant cell
against infection with Cucumber Green Mottle Mosaic Virus (CGMMV)
comprising providing the plant or plant cell with a polynucleotide
sequence (N1) that, upon transformation into a plant and transcription
into RNA, either generates resistance against infection with CGMMV or,
optionally, does not generate replicase activity. (N1) comprises first
and second DNA sequences. The first DNA sequence comprises a promoter,
operably linked to a first DNA region, which is capable of being
transcribed into a sense RNA molecule with a nucleotide sequence
comprising a sense nucleotide sequence of at least 10 consecutive
nucleotides having between 75 and 100% sequence identity with at least
part of the nucleotide sequence of the genome of the CGMMV, capable of
infecting the plant or the plant cell. Optionally, a DNA region is
involved in transcription termination and polyadenylation functioning in
plant cells and the second chimeric DNA comprises a promoter, operably
linked to a second DNA region capable of being transcribed into an
antisense RNA molecule with a nucleotide sequence comprising an antisense
nucleotide sequence including at least 10 consecutive nucleotides, having
between 75 and 100% sequence identity with the complement of at least 10
consecutive nucleotides of the sense nucleotide sequence; or the sense
and antisense RNA molecules are capable of forming a double stranded RNA
region by base-pairing between the regions which are complementary. Also
included are a genetic construct suitable for transforming a plant, a
bacterium, e.g. Agrobacterium, that can be used to transform a plant and
contains the genetic construct, a transgenic plant or plant cell or its
CC descendant and a cultivation material, e.g. seed, tubers, roots, stalks
or seedlings for a plant. The method is useful for generating resistance
CC against CGMMV in plants, which are susceptible to infection with CGMMV,
CC such as Cucurbitaceae species, e.g. melon (Cucumis melo), cucumber (C.
CC sativus), watermelon (Citrullus vulgaris) or bottlegourd (Lagenaria
CC siceraria). The present sequence is a reverse transcriptase (RT)-PCR
CC primer designed to amplify the coat protein encoding region from 10
CC isolates of CGMMV
XX
SQ Sequence 17 BP; 0 A; 1 C; 9 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1290 CCACAGCCACAGCC 1306
||||| ||||| |||||
Db 17 CCACAAACCCACAGCC 1
RESULT 646
ABN02042/c
ID ABN02042 standard; DNA; 17 BP.
XX AC ABN02042;
XX DT 29-MAY-2002 (first entry)
XX DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2034.
XX KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
XX KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX KW skeletal muscle disorder; amplicon; screening; ss.
XX OS Homo sapiens.
XX PN WO200192524-A2.
XX PD 06-DEC-2001.
XX PF 25-MAY-2001; 2001WO-US016981.
XX PR 26-MAY-2000; 2000US-0207456P.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-0004263.
XX PR 30-JAN-2001; 2001WO-US000661.
XX PR 30-JAN-2001; 2001WO-US000662.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 30-JAN-2001; 2001WO-US000670.
XX PR 05-FEB-2001; 2001US-0266860P.
XX PA (AEOM-) AEOMICA INC.
XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
or as specific biomolecule capture probes for surface-enhanced laser
desorption ionization, comprises human myosin-like protein hGDMLP-1.
Disclosure; SEQ ID NO 2034; 214pp; English.
The present invention describes a human genome-derived myosin-like
protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
1 can be used in gene therapy and vaccine production. The hGDMLP-1
```

CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 4 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 749 TGTGCACCTGCGATGCA 765
 || ||||| |||||
 Db 17 TGGGCGACCTTCCTGCA 1

RESULT 647
 ABN00316
 ID ABN00316 standard; DNA; 17 BP.
 AC ABN00316;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:308.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.

XX
 XX 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (AEOM-) AEMICA INC.
 XX

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX

DR WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption/ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 XX Disclosure; SEQ ID NO 308; 214pp; English.

XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX

SQ Sequence 17 BP; 8 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGGGGGAG 1029
 ||||| ||||| |||||
 Db 1 CTGAAAAGAGGGCCAG 17

RESULT 648
 ABN10596/C

ID ABN10596 standard; DNA; 17 BP.

AC ABN10596;

XX 29-MAY-2002 (first entry)

DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10588.

XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.

OS Homo sapiens.

XX WO200192524-A2.

XX 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

PR 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 DR
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 PT
 XX Disclosure; SEQ ID NO 10588; 214pp; English.
 PS
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 2 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1022 AGGGGAGCTTGAGGA 1038
 DB | | | | | | | | | | | | | | | | | | | |
 17 AAGGGCAGCTTCAAGGA 1
 RESULT 649
 ABN06070/C
 ID ABN06070 standard; DNA; 17 BP.
 AC
 XX ABN06070;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6062.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX

PF 25-MAY-2001; 2001WO-US016981.
 XX
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 DR
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 PT
 XX Disclosure; SEQ ID NO 6062; 214pp; English.
 PS
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 4 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1130 CCTTCAGTCCAGCTCC 1146
 DB | | | | | | | | | | | | | | | | | | | |
 17 CCTTCAGTCCAGCTCC 1
 RESULT 650
 ABN08403/C
 ID ABN08403 standard; DNA; 17 BP.
 AC
 XX ABN08403;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8395.

XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX SQ Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1095 CCCACCTGGCTTCA 1111
 Db ||||| ||||| |||||
 17 CCTCACACTGGCTTCA 1
 RESULT 654
 ID ABN02041/c
 AC ABN02041; standard; DNA; 17 BP.
 XX
 XX 29-MAY-2002 (first entry)
 DT
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2033.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200192524-A2.
 PD
 XX 06-DEC-2001.
 XX
 XX 25-MAY-2001; 2001WO-US016981.
 XX
 XX 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.

PA (ABOM-) ABOMICA INC.
 FI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 XX
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption/ionisation, comprises human myosin-like protein hGDMPLP-1.
 XX
 XX Disclosure; SEQ ID NO 2033; 214bp; English.
 XX
 XX The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX SQ Sequence 17 BP; 3 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 750 GTGCACCTGCCATGCAG 766
 Db ||||| ||||| |||||
 17 GGGCACCTTCCCTGCAG 1
 RESULT 655
 ID ABK25912
 AC ABK25912 standard; DNA; 17 BP.
 XX
 XX 09-APR-2002 (first entry)
 DT
 XX
 XX Albino plant producing genome altering oligonucleotide #84.
 DE
 XX
 KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
 KW o-methyl modification; DNA modification; phosphorothioate linkage;
 KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
 KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;
 KW amino acid over production; herbicide resistance; glyphosate resistance;
 KW imidazolinone herbicide resistance; triazine resistance; disease resistance;
 KW porphyrin herbicide resistance; modified starch production; waxy starch;
 KW modified oil production; modified starch production; waxy starch;
 KW altered floral morphology; male-sterile plant; albino mutant;
 KW modified fatty acid content; reduced palmitate production; albino plant;
 KW increased stearate production; reduced linolenic acid production;
 KW photosynthetic process.
 XX
 OS Triticum aestivum.
 OS Synthetic.
 XX
 XX WO200192512-A2.

XX PD 06-DEC-2001.
 XX PF 01-JUN-2001; 2001WO-US017672.
 XX PR 01-JUN-2000; 2000US-0208538P.
 XX PR 30-OCT-2000; 2000US-0244989P.
 XX PR 27-MAR-2001; 2001US-00818875.
 XX PA (UYDE) UNIV DELAWARE.
 XX PN Kmiec EB, Gamper HB, Rice MC, Kim J;
 XX PD WPI; 2002-106307/14.
 XX DR New oligonucleotides with modified nuclease-resistant termini, useful for
 XX PT creating plants with desired phenotypes, e.g. stress tolerance, improved
 XX PT nutritional value, herbicide or disease resistance, or modified oil
 XX PT production.
 XX PS Claim 7; Page 119; 220pp; English.
 XX CC The invention relates to an oligonucleotide for targeted alteration of a
 CC genetic sequence, which comprises a single-stranded oligonucleotide
 CC having a DNA domain. The DNA domain has at least one mismatch with
 CC respect to the genetic sequence to be altered and further comprises
 CC chemical modifications of the oligonucleotide. The chemical modifications
 CC consist of o-methyl modification, an LNA modification, two or more
 CC phosphorothioate linkages on a terminus, or a combination of any two or
 CC more of these modifications. The oligonucleotides are useful for
 CC directing repair or alteration of plant genetic information. The
 CC oligonucleotides are particularly useful for creating plants with desired
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
 CC nutritional value (e.g. altering amino acid content of plants or
 CC conferring amino acid over production), herbicide resistance (e.g.
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
 CC resistance, porphyrin herbicide resistance or triazine resistance),
 CC disease resistance, modified oil production, modified starch production
 CC (e.g. increased starch or production of waxy starch), altered floral
 CC morphology (e.g. male-sterile plants) or modified fatty acid content
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
 CC The oligonucleotides are also useful for producing albino mutants for the
 CC analysis of photosynthetic processes. This sequence represents a genome
 CC altering oligonucleotide of the invention.
 XX SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 869 CTGAGGACTCAGGCACC 885
 DB 1 CTGAGGACTCAGTCGCC 17
 RESULT 656
 ABK25911/c
 ID ABK25911 standard; DNA; 17 BP.
 XX AC ABK25911;
 XX DT 09-APR-2002 (first entry)
 XX DE Albino plant producing genome altering oligonucleotide #83.
 XX CC Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
 KW o-methyl modification; LNA modification; phosphorothioate linkage;
 KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
 KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;
 KW amino acid over production; herbicide resistance; glyphosate resistance;
 KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
 KW porphyrin herbicide resistance; triazine resistance; disease resistance;

KW modified oil production; modified starch production; waxy starch;
 KW altered floral morphology; male-sterile plant; albino mutant;
 KW modified fatty acid content; reduced palmitate production; albino plant;
 KW increased stearate production; reduced linolenic acid production;
 KW photosynthetic process.
 XX OS Triticum aestivum.
 XX OS Synthetic.
 XX XX WO200192512-A2.
 XX PN 06-DEC-2001.
 XX XX 01-JUN-2001; 2001WO-US017672.
 XX PF 01-JUN-2000; 2000US-0208538P.
 XX PR 30-OCT-2000; 2000US-0244989P.
 XX PR 27-MAR-2001; 2001US-00818875.
 XX XX (UYDE) UNIV DELAWARE.
 XX PA Kmiec EB, Gamper HB, Rice MC, Kim J;
 XX XX WPI; 2002-106307/14.
 XX DR New oligonucleotides with modified nuclease-resistant termini, useful for
 XX PT creating plants with desired phenotypes, e.g. stress tolerance, improved
 XX PT nutritional value, herbicide or disease resistance, or modified oil
 XX PT production.
 XX PS Claim 7; Page 119; 220pp; English.
 XX CC The invention relates to an oligonucleotide for targeted alteration of a
 CC genetic sequence, which comprises a single-stranded oligonucleotide
 CC having a DNA domain. The DNA domain has at least one mismatch with
 CC respect to the genetic sequence to be altered and further comprises
 CC chemical modifications of the oligonucleotide. The chemical modifications
 CC consist of o-methyl modification, an LNA modification, two or more
 CC phosphorothioate linkages on a terminus, or a combination of any two or
 CC more of these modifications. The oligonucleotides are useful for
 CC directing repair or alteration of plant genetic information. The
 CC oligonucleotides are particularly useful for creating plants with desired
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
 CC nutritional value (e.g. altering amino acid content of plants or
 CC conferring amino acid over production), herbicide resistance (e.g.
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
 CC resistance, porphyrin herbicide resistance or triazine resistance),
 CC disease resistance, modified oil production, modified starch production
 CC (e.g. increased starch or production of waxy starch), altered floral
 CC morphology (e.g. male-sterile plants) or modified fatty acid content
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
 CC The oligonucleotides are also useful for producing albino mutants for the
 CC analysis of photosynthetic processes. This sequence represents a genome
 CC altering oligonucleotide of the invention.
 XX SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 869 CTGAGGACTCAGGCACC 885
 DB 17 CTGAGGACTCAGTCGCC 1
 RESULT 657
 ABV80576/c
 ID ABV80576 standard; DNA; 17 BP.
 XX AC ABV80576;
 XX DT 03-JAN-2003 (first entry)

XX DE Human HTPL scanning oligonucleotide SEQ ID 1822.
 XX DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX OS Homo sapiens.
 XX PN EPI229046-A2.
 XX PD 07-AUG-2002.
 XX PF 28-JAN-2002; 2002EP-00001167.
 XX PR 30-JAN-2001; 2001WO-US000663.
 XX PR 30-JAN-2001; 2001WO-US000664.
 XX PR 30-JAN-2001; 2001WO-US000665.
 XX PR 30-JAN-2001; 2001WO-US000667.
 XX PR 30-JAN-2001; 2001WO-US000668.
 XX PR 23-MAY-2001; 2001US-00864761.
 XX PR 09-OCT-2001; 2001US-0327898P.
 XX PA (ABOM-) ABOMICA INC.
 XX PI Zhan J;
 XX WT; 2002-676582/73.
 XX DR Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPL.
 XX Example 2; Page 302; 718pp; English.
 XX The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPL is
 CC important in regulating male germ cell development, and the HTPL gene was
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 XX SQ Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1122 CAGTTCACCTTCACCT 1138
 |||||
 17 CAGTTCACCTTCATCT 1
 Db
 RESULT 658
 ABK18988
 ID ABK18988 standard; RNA; 17 BP.
 XX
 AC ABK18988;

XX DT 09-APR-2002 (first entry)
 DE Human ERG DNzyme target sequence Seq ID No 1635.
 XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
 KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNzyme; inozyme;
 KW ambrzyme.
 XX OS Homo sapiens.
 XX PN WO200188124-A2.
 XX PD 22-NOV-2001.
 XX PF 16-MAY-2001; 2001WO-US015866.
 XX PR 16-MAY-2000; 2000US-00572021.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX (GLAXO) GLAXO GROUP LTD.
 XX Jarvis T, Von Carlowitz I, Meswigen JA, McLaughlin F, Randi AM;
 XX WPI; 2002-082995/11.
 XX DR Novel polynucleotide which down regulates expression of Ets-related gene,
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
 XX Claim 4; Page 106; 149pp; English.
 XX The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK2719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX SQ Sequence 17 BP; 4 A; 8 C; 2 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 64.7%; Pred. No. 5.9e+02;
 Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;
 QY 1128 CAGTTCACCTTCACCT 1144
 |||||
 1 CAGCUCCACUCGACGU 17
 Db

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RESULT 659
ABK17499
XX ID ABK17499 standard; RNA; 17 BP.
XX AC
XX ABK17499;
XX
XX DT 09-APR-2002 (first entry)
XX
XX DE Human ERG hammerhead ribozyme target sequence, Seq ID No 146.
XX
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulvular; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX amberzyme.
XX
XX OS Homo sapiens.
XX
XX FN WO200188124-A2.
XX
XX PD 22-NOV-2001.
XX
XX PF 16-MAY-2001; 2001WO-US015866.
XX
XX PR 16-MAY-2000; 2000US-00572021.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX (GLAX ) GLAXO GROUP LTD.
XX
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX
XX DR Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX PS Claim 4; Page 61; 149pp; English.
XX
XX CC The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and
XX related PCR primers of the invention
XX
XX SQ Sequence 17 BP; 4 A; 8 C; 2 G; 0 T; 3 U; 0 Other;

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Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 5.9e+02;
Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTCACTTCAGTCCA 1147
   |||:|||||:
DB 1 CUCCAGUCCAGUGCA 17

RESULT 660
ABK18610
XX ID ABK18610 standard; RNA; 17 BP.
XX
XX AC ABK18610;
XX
XX DT 09-APR-2002 (first entry)
XX
XX DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1257.
XX
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulvular; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX amberzyme.
XX
XX OS Homo sapiens.
XX
XX FN WO200188124-A2.
XX
XX PD 22-NOV-2001.
XX
XX PF 16-MAY-2001; 2001WO-US015866.
XX
XX PR 16-MAY-2000; 2000US-00572021.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX (GLAX ) GLAXO GROUP LTD.
XX
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX
XX DR Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX PS Claim 4; Page 83; 149pp; English.
XX
XX CC The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically

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CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX
 SQ Sequence 17 BP; 6 A; 8 C; 2 G; 0 T; 1 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 76.5%; Pred. No. 5.9e+02;
 Matches 13; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 1049 AGCCCTGGCCCAAC 1065
 ||||| : ||| |||||
 Db 1 AGCCCAUGCCCAAC 17
 RESULT 661
 ABK18825
 ID ABK18825 standard; RNA; 17 BP.
 XX
 AC ABK18825;
 XX
 DT 09-APR-2002 (first entry)
 XX
 DE Human ERG DNAzyme target sequence Seq ID No 1472.
 XX
 KW Human; hammerhead ribozyme; cytosolic; antitumour; antidiabetic;
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
 KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
 KW amberzyme.
 XX
 OS Homo sapiens.
 XX
 XX WO200188124-A2.
 PN
 XX
 XX 22-NOV-2001.
 PD
 XX
 XX 16-MAY-2001; 2001WO-US015866.
 PF
 XX
 XX 16-MAY-2000; 2000US-00572021.
 PR
 XX
 XX (RISO-) RIBOZYME PHARM INC.
 PA
 XX (GLAX) GLAXO GROUP LTD.
 XX
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
 PI WPI; 2002-082995/11.
 XX
 XX Novel polynucleotide which down regulates expression of Ets-related gene,
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
 XX
 XX Claim 4; Page 92; 149pp; English.
 PS
 XX The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or

CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX
 SQ Sequence 17 BP; 2 A; 7 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 64.7%; Pred. No. 5.9e+02;
 Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;
 QY 1172 ACTTTGGCGCTCCCGC 1188
 ||::: ||| |||||
 Db 1 ACUUUGUGCGCCAC 17
 RESULT 662
 ABK18986
 ID ABK18986 standard; RNA; 17 BP.
 XX
 AC ABK18986;
 XX
 DT 09-APR-2002 (first entry)
 XX
 DE Human ERG DNAzyme target sequence Seq ID No 1633.
 XX
 KW Human; hammerhead ribozyme; cytosolic; antitumour; antidiabetic;
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
 KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
 KW amberzyme.
 XX
 OS Homo sapiens.
 XX
 XX WO200188124-A2.
 PN
 XX
 XX 22-NOV-2001.
 PD
 XX
 XX 16-MAY-2001; 2001WO-US015866.
 PF
 XX
 XX 16-MAY-2000; 2000US-00572021.
 PR
 XX
 XX (RISO-) RIBOZYME PHARM INC.
 PA
 XX (GLAX) GLAXO GROUP LTD.
 XX
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
 PI WPI; 2002-082995/11.
 XX
 XX Novel polynucleotide which down regulates expression of Ets-related gene,
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
 XX
 XX Claim 4; Page 106; 149pp; English.
 PS
 XX The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or

CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC Abx17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention

XX
 XX Sequence 17 BP; 3 A; 5 C; 5 G; 0 T; 4 U; 0 Other;

The invention relates to a nucleic acid molecule (I) which down regulates expression of an ERG-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verrucae vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK2719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention

Sequence 17 BP; 2 A; 13 C; 1 G; 0 T; 1 U; 0 Other;

Query Match	0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity	82.4%; Pred.No. 5.9e+02;
Matches	14; Conservative 0; Mismatches 3; Indels 0; Gaps 0

QY	1251	CCCCATCCCCAACCCCC	1267
Db	1	CUCACGCCCCACCCCC	17

RESULT 664		
ABK18580/c		
ID	ABK18580	standard; RNA; 17 BP.
XX		
AC	ABK18580;	
XX		
DT		
XX	09-APR-2002	(first entry)
DE	Human ERG G-cleaver ribozyme target sequence	Seq ID No 1227.
XX		
KW	Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;	
KW	ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;	
KW	vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;	
KW	tumour angiogenesis; diabetic retinopathy; macular degeneration;	
KW	neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;	
KW	angiofibroma of tuberous sclerosis; port-wine stain; wound healing;	
KW	Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;	
KW	Oslar-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;	
XX	ambezyme.	
XX		
OS	Homo sapiens.	
XX		
PN	WC0200188124-A2.	
XX		
PD	22-NOV-2001.	
XX		
PF	16-MAY-2001; 2001WO-US015866.	
XX		
PR	16-MAY-2000; 2000US-00572021.	
XX		
PA	(RIBO-) RIBOZYME PHARM INC.	
PA	(GLAX) GLAXO GROUP LTD.	
XX		
PI	Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;	
XX		
DR	WPI; 2002-082995/11.	

XX Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
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XX

PS Claim 4; Page 82; 149pp; English.

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CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
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CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
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CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention

XX Sequence 17 BP; 6 A; 7 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 859 GTTAGGGGCACTGAGGA 875

|||||
17 GTTTGGGCACTGTGGA 1

RESULT 665

ABK18023

ID ABK18023 standard; RNA; 17 BP.

AC ABK18023;

DT 09-APR-2002 (first entry)

XX Human ERG hammerhead ribozyme target sequence, Seq ID No 670.

XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; aneurysmal; antipsoriatic; virucide; osteoporosis;
KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNase; inozyme;
KW amberzyme.

OS Homo sapiens.

XX WO200118124-A2.

EN 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.

XX 16-MAY-2000; 2000US-00572021.

PR

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(RIBO-) RIBOZYME PHARM INC.

(GLAX) GLAXO GROUP LTD.

Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

WPI; 2002-082995/11.

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CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
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CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
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CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
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CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention

XX Sequence 17 BP; 5 A; 9 C; 1 G; 0 T; 2 U; 0 Other;

Query Match

Best Local Similarity 0.6%; Score 12.2; DB 1; Length 17;

Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1133 TCACCTCCAGCTCCACC 1149

:|||||: |||

1 UCACCCCGAGTCAAC 17

RESULT 666

AAD27399

ID AAD27399 standard; DNA; 17 BP.

AC AAD27399;

DT 18-APR-2002 (first entry)

XX Human tumour necrosis factor (-308) DNA amplifying probe 1.
DE Human; interleukin-1; inflammatory disorder; coronary artery disease;
KW periodontal disease; Alzheimer's disease; atherosclerosis; osteoporosis;
KW immune response; insulin-dependent diabetes; diabetic retinopathy;
KW renal disease; diabetic nephropathy; hepatic fibrosis; alopecia areata;
KW Graves disease; Graves ophthalmopathy; systemic lupus erythematosus;
KW extrathyroid disease; lichen sclerosis; juvenile chronic arthritis;
KW rheumatoid arthritis; gastric cancer; ulcerative colitis; asthma;
KW interstitial lung disease; idiopathic pulmonary fibrosis; sepsis;
KW multiple sclerosis; acne; cardiac; dermatological; neuroprotective;
KW notropic; osteopathic; ophthalmological; tumour necrosis factor; TNF;
KW probe; ss.

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OS Homo sapiens.
XX Key Location/Qualifiers
PH modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "TET labelled adenosine"
FT 17
FT modified_base
FT /*tag= b
FT /mod_base= OTHER
FT /note= "TAMRA labelled cytosine"
XX WO200200933-A2.
XX 03-JAN-2002.
XX 22-JUN-2001; 2001WO-US020079.
XX 23-JUN-2000; 2000US-0213853P.
XX (INTE-) INTERLEUKIN GENETICS INC.
XX Duff GW, Kornman KS;
XX WPI; 2002-139934/18.
XX Screening a substance in a subject for modulating an immune response,
XX comprises genotyping to identify the test subject, and observing a
XX biomarker before and after contacting the subject with the test
XX substance.
XX Example; Page 43; 54pp; English.
XX The present invention relates to methods for identifying a test substance
XX that modulate the immune response in a genotype specific manner. Methods
XX of the invention involve genotyping subjects to identify those having a
XX genotype (e.g. interleukin-1; IL-1) associated with one or more
XX inflammatory disorder. The method comprises genotyping a subject having
XX an inflammatory disease-associated genotype and observing a biomarker in
XX the subject before and after the subject is contacted with the test
XX substance. The methods or cells associated with inflammatory diseases are
XX useful for identifying a substance that is likely to prevent or diminish
XX a specific biological response in subjects having inflammatory disease-
XX associated genotype, where the genotype is associated a pre-disposition
XX to one or more of periodontal disease, coronary artery disease
XX Alzheimer's disease, atherosclerosis, osteoporosis, insulin-dependent
XX diabetes, diabetic retinopathy, end-stage renal disease, diabetic
XX nephropathy, hepatic fibrosis, alopecia areata, Graves disease, Graves
XX ophthalmopathy, extrathyroid disease, systemic lupus erythematosus,
XX lichen sclerosis, rheumatoid arthritis, juvenile chronic arthritis,
XX gastric cancer, ulcerative colitis, asthma, interstitial lung disease,
XX multiple sclerosis, idiopathic pulmonary fibrosis, sepsis and acne. The
XX invention also relates to a kit comprising primers for the identification
XX of one or more IL-1 polymorphism. The present sequence is a probe which
XX is used for amplifying tumour necrosis factor (TNF; -308) DNA. This probe
XX is used in the exemplification of the invention
XX SQ Sequence 17 BP; 2 A; 11 C; 2 G; 2 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;
XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX QY 1250 ACCCCATCCCAACCC 1265
XX ||||| ||||| |||||
XX Db 1 ACCCGTCCCATGCC 17
XX RESULT 667
XX ABS7491
XX ID ABS7491 standard; DNA; 17 BP.
XX AC ABS7491;

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XX 24-DEC-2002 (first entry)
XX Human PAPP-Ea associated 17-mer SEQ ID 467.
XX PAPP-E; human; pregnancy associated plasma protein E; abortive;
XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
XX dysgenetic pregnancy; primer; ss.
XX Homo sapiens.
XX US2002102252-A1.
XX 01-AUG-2002.
XX 06-APR-2001; 2001US-00827998.
XX 26-MAY-2000; 2000US-0207456P.
XX (GUY/) GU Y.
XX (SHAN/) SHANNON M E.
XX Gu Y, Shannon ME;
XX WPI; 2002-697817/75.
XX New isolated nucleic acid encoding an isoform of human pregnancy
XX associated plasma protein E, for preventing or aborting pregnancy.
XX Example 2; Page 136; 353pp; English.
XX This invention describes a novel isolated nucleic acid that encodes one
XX of three new isoforms of human pregnancy associated plasma protein E,
XX hPAPP-E. The products of the invention have abortive and contraceptive
XX activity and can be used for gene therapy or in a vaccine. The nucleic
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be
XX used in pharmaceutical compositions or vaccines for preventing or
XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
XX dysgenetic pregnancies. The nucleic acids are used as probes to assess
XX the level of PAPP-E isoform mRNA in chorionic villus samples, and the
XX antibodies can be used to assess the expression levels of PAPP-E isoform
XX proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
XX antenatally. This sequence represents an oligomer used in scanning the
XX human PAPP-E genes described in the disclosure of the invention
XX SQ Sequence 17 BP; 6 A; 1 C; 9 G; 1 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;
XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX QY 1013 CTGAAGAAGAGGGGGAG 1029
XX ||||| ||||| |||||
XX Db 1 CTGAAGAAGAGGGGGG 17
XX RESULT 668
XX ABV90456/C
XX ID ABV90456 standard; DNA; 17 BP.
XX AC ABV90456;
XX 23-DEC-2002 (first entry)
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1169.
XX Human; POSHL1; SH3 domain; POSH-like signalling protein 1; oncogene;
XX Rho GTPase; signal transduction; gene expression; cancer; vaccine;
XX gene therapy; transgenic; ss.
XX Homo sapiens.
XX EP1239051-A2.

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KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX Homo sapiens.
 OS
 XX
 PN EP1239051-A2.
 XX
 PD 11-SEP-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001165.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M;
 XX
 DR WPI; 2002-684061/74.
 XX
 PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX
 PS Example 2; SEQ ID NO 1430; 60pp + Sequence Listing; English.
 XX
 CC The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they are useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX
 SQ Sequence 17 BP; 4 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1044 TACTAAGCCCTGGGCC 1060
 |||||
 Db 1 TACTCAGCCCATGGACC 17
 |||||
 RESULT 671
 ABV91245/c
 ID ABV91245 standard; DNA; 17 BP.
 XX
 AC ABV91245;
 XX
 DT 23-DEC-2002 (first entry)
 XX

DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1958.
 XX
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW Gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1239051-A2.
 XX
 PD 11-SEP-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001165.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M;
 XX
 DR WPI; 2002-684061/74.
 XX
 PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX
 PS Example 2; SEQ ID NO 1958; 60pp + Sequence Listing; English.
 XX
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 CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they are useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
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 CC present sequence is that of a scanning oligonucleotide useful in examples
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 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
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 SQ Sequence 17 BP; 2 A; 1 C; 10 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1249 GACCCCATCCCCACCC 1265
 |||||
 Db 17 GACCCCATCTCCACCAC 1
 |||||
 RESULT 672
 ABV90718
 ID ABV90718 standard; DNA; 17 BP.
 XX
 AC ABV90718;
 XX

XX 23-DEC-2002 (first entry)
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1431.
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX Homo sapiens.
XX EP1239051-A2.
XX 11-SEP-2002.
XX 28-JAN-2002; 2002EP-00001165.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 30-JAN-2001; 2001WO-US000670.
XX 23-MAY-2001; 2001US-00864761.
XX 10-OCT-2001; 2001US-0328205P.
XX (AEOM-) ABOMICA INC.
XX Shannon M;
XX WPI; 2002-684061/74.
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
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PT activity of human POSHL1.
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SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. NO. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1045 ACTAGCCCTGGCCGCC 1061
DB 1 ACTAGCCCATGGACCC 17
RESULT 673
ABV90578/C

ID ABV90578 standard; DNA; 17 BP.
XX AC ABV90578;
XX 23-DEC-2002 (first entry)
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1291.
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX Homo sapiens.
XX EP1239051-A2.
XX 11-SEP-2002.
XX 28-JAN-2002; 2002EP-00001165.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 30-JAN-2001; 2001WO-US000670.
XX 23-MAY-2001; 2001US-00864761.
XX 10-OCT-2001; 2001US-0328205P.
XX (AEOM-) ABOMICA INC.
XX Shannon M;
XX WPI; 2002-684061/74.
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX Example 2; SEQ ID NO 1291; 60pp + Sequence Listing; English.
XX The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, AB883999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (II) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they are useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX Sequence 17 BP; 3 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. NO. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1028 AGCTTGAGGAAGAACTACT 1044
DB 17 AGCTGGAGGAAGAACTCT 1

RESULT 674
ABV90110/C
ID ABV90110 standard; DNA; 17 BP.
XX AC ABV90110;
XX DT 23-DEC-2002 (first entry)
XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 823.
XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
XX KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
XX KW Gene therapy; transgenic; ss.
XX OS Homo sapiens.
XX PN EPI239051-A2.
XX PD 11-SEP-2002.
XX PF 28-JAN-2002; 2002EP-00001165.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 10-OCT-2001; 2001US-0328205P.
XX PA (AEOM-) AEOMICA INC.
XX PI Shannon M;
XX DR WPI; 2002-684061/74.
XX PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
XX PT -1, useful for treating disorders associated with decreased expression or
XX PT activity of human POSHL1.
XX PS Example 2; SEQ ID NO 823; 60pp + Sequence Listing; English.
XX CC The invention relates to an isolated SH3 domain (POSH)-like signalling
XX CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
XX CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),
XX CC (SI) having 95% deviations, especially conservative substitutions or a
XX CC fragment of the sequences comprising at least 8 contiguous amino acids.
XX CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
XX CC adaptor protein that interacts with Rho family small GTPases as well as
XX CC downstream components of the signal transduction pathway. (I) is useful
XX CC for identifying a specific binding partner. (I) and nucleic acids (II)
XX CC encoding (I) are useful for diagnosing, monitoring disease and treating
XX CC caused by altered expression of human POSHL1 including diagnosing and
XX CC treating cancer, they are useful in the development of vaccines and (II) is
XX CC useful in gene therapy. (II) is useful for constructing microarrays which
XX CC transgenic non-human animals capable of producing the proteins. The
XX CC present sequence is that of a scanning oligonucleotide useful in examples
XX CC of the invention. Note: The present sequence did not form part of the
XX CC printed specification, but is based on sequence information supplied to
XX CC Derwent by the European Patent Office
XX SQ Sequence 17 BP; 1 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1183 CCCCGCAGAGAGGTGGC 1199

DB 17 CCTGCGAGCGGGGC 1
RESULT 675
ABV90710
ID ABV90710 standard; DNA; 17 BP.
XX AC ABV90710;
XX DT 23-DEC-2002 (first entry)
XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1423.
XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
XX KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
XX KW Gene therapy; transgenic; ss.
XX OS Homo sapiens.
XX PN EPI239051-A2.
XX PD 11-SEP-2002.
XX PF 28-JAN-2002; 2002EP-00001165.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 10-OCT-2001; 2001US-0328205P.
XX PA (AEOM-) AEOMICA INC.
XX PI Shannon M;
XX DR WPI; 2002-684061/74.
XX PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
XX PT -1, useful for treating disorders associated with decreased expression or
XX PT activity of human POSHL1.
XX PS Example 2; SEQ ID NO 1423; 60pp + Sequence Listing; English.
XX CC The invention relates to an isolated SH3 domain (POSH)-like signalling
XX CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
XX CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),
XX CC (SI) having 95% deviations, especially conservative substitutions or a
XX CC fragment of the sequences comprising at least 8 contiguous amino acids.
XX CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
XX CC adaptor protein that interacts with Rho family small GTPases as well as
XX CC downstream components of the signal transduction pathway. (I) is useful
XX CC for identifying a specific binding partner. (I) and nucleic acids (II)
XX CC encoding (I) are useful for diagnosing, monitoring disease and treating
XX CC caused by altered expression of human POSHL1 including diagnosing and
XX CC treating cancer, they are useful in the development of vaccines and (II) is
XX CC useful in gene therapy. (II) is useful for constructing microarrays which
XX CC transgenic non-human animals capable of producing the proteins. The
XX CC present sequence is that of a scanning oligonucleotide useful in examples
XX CC of the invention. Note: The present sequence did not form part of the
XX CC printed specification, but is based on sequence information supplied to
XX CC Derwent by the European Patent Office
XX SQ Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1183 CCCCGCAGAGAGGTGGC 1199

CC Derwent by the European Patent Office
 XX Sequence 17 BP; 2 A; 0 C; 11 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1250 ACCCATCCCGACCC 1266
 17 ACCCATCTCCACACC 1

DB
 RESULT 678
 ABV90714
 ID ABV90714 standard; DNA; 17 BP.
 AC ABV90714;
 XX
 DT 23-DEC-2002 (first entry)
 XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1427.
 DE Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX Homo sapiens.
 OS
 XX EP1239051-A2.
 PN
 XX 11-SEP-2002.
 PD
 XX 28-JAN-2001; 2001WO-US000663.
 PF 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 23-MAY-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX (AEOM-) AEOMICA INC.
 PA
 XX Shannon M;
 PI
 XX WPI; 2002-684061/74.
 DR
 XX Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 PS Example 2; SEQ ID NO 1427; 60pp + Sequence Listing; English.
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, AB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The

CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX Sequence 17 BP; 3 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1041 TACTACTAAGCCCTGG 1057
 1 TCCCTACTCAGCCCATGG 17

DB
 RESULT 679
 ABV91249/c
 ID ABV91249 standard; DNA; 17 BP.
 AC ABV91249;
 XX
 DT 23-DEC-2002 (first entry)
 XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1962.
 DE Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX Homo sapiens.
 OS
 XX EP1239051-A2.
 PN
 XX 11-SEP-2002.
 PD
 XX 28-JAN-2001; 2001WO-US000663.
 PF 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX (AEOM-) AEOMICA INC.
 PA
 XX Shannon M;
 PI
 XX WPI; 2002-684061/74.
 DR
 XX Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 PS Example 2; SEQ ID NO 1962; 60pp + Sequence Listing; English.
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, AB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The

CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office

XX SQ Sequence 17 BP; 4 A; 2 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCA 1261
Db 17 CTTGACCCCATCCCA 1

RESULT 680
ABV90712
ID ABV90712 standard; DNA; 17 BP.
XX AC ABV90712;
XX DT 23-DEC-2002 (first entry)
XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1425.
XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX OS Homo sapiens.
XX XN EPI239051-A2.
XX PD 11-SEP-2002.
XX PF 28-JAN-2002; 2002EP-00001165.
XX PR 30-JAN-2001; 2001WO-US0000663.
XX PR 30-JAN-2001; 2001WO-US0000664.
XX PR 30-JAN-2001; 2001WO-US0000665.
XX PR 30-JAN-2001; 2001WO-US0000666.
XX PR 30-JAN-2001; 2001WO-US0000667.
XX PR 30-JAN-2001; 2001WO-US0000668.
XX PR 30-JAN-2001; 2001WO-US0000669.
XX PR 30-JAN-2001; 2001WO-US0000670.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 10-OCT-2001; 2001US-0328205P.
XX PA (ABOM-) ABOMICA INC.
XX PI Shannon M;
XX FI WPI; 2002-684061/74.
XX DR Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
XX PT -1, useful for treating disorders associated with decreased expression or
XX PT activity of human POSHL1.
XX PS Example 2; SEQ ID NO 1425; 60pp + Sequence Listing; English.
XX CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (SI, ABH83999), a sequence having 65% sequence identity to (SI),
CC (SI) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)

CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they are useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office

XX SQ Sequence 17 BP; 4 A; 8 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1039 ACTACTACTAAGCCCT 1055
Db 1 ACTCTACTCAGCCCAT 17

RESULT 681
ABK56419
ID ABK56419 standard; RNA; 17 BP.
XX AC ABK56419;
XX DT 02-JUL-2002 (first entry)
XX DE Human CLCA1 gene enzymatic nucleic acid #790.
XX KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX OS Homo sapiens.
XX XN WO200211674-A2.
XX PD 14-FEB-2002.
XX PF 09-AUG-2001; 2001WO-US024970.
XX PR 09-AUG-2000; 2000US-0224393P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (SYNT) SYNTX USA LLC.
XX PA (THOM) THOMPSON J.
XX PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
XX PI Grupe A;
XX DR WPI; 2002-217145/27.
XX PT Enzymatic polynucleotide that down regulates expression of chloride
XX PT channel calcium activated gene, useful for treating Chronic obstructive
XX PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX PS Claim 4; Page 70; 152pp; English.
XX CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises

Db 1 CTACGCCACCACTCCA 17

RESULT 684

ABT34365
ID ABT34365 standard; DNA; 17 BP.

XX AC ABT34365;

XX DT 12-JUN-2003 (first entry)

XX DE Tumour suppression related human fukutin oligo SEQ ID No 2.

XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.

XX OS Homo sapiens.

XX PN WO2003025175-A2.

XX PD 27-MAR-2003.

XX PF 17-SEP-2002; 2002WO-IB004208.

XX PR 17-SEP-2001; 2001FR-00011978.

XX PA (MOLE-) MOLECULAR ENGINES LAB.

XX PI Telerman A, Amson R, Tuijnder M;

XX DR WPI; 2003-313353/30.

XX PT New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.

XX PS Disclosure; Page 34; 720pp; French.

XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX CC given in the specification, a sequence containing at least 15 consecutive,
XX CC nucleotides from the 17 mer sequence, a sequence with, after optimal
XX CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX CC hybridizes to them under highly stringent conditions, or the complement
XX CC of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acids of the invention are useful as probes and primers for detecting,
XX CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX CC component of a gene chip, in vitro as (anti)sense reagents, and for
XX CC production of recombinant polypeptides. Any of the nucleic acids,
XX CC polypeptides, vectors containing the nucleic acids, cells containing the
XX CC vector or antibodies directed against the polypeptides are useful for
XX CC preparation of pharmaceuticals for prevention and/or treatment of viral
XX CC diseases that are characterised by development of tumours or cell
XX CC degeneration, specifically cancer but also Alzheimer's disease and
XX CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX CC patient samples is useful for diagnosis and/or prognosis of these
XX CC diseases. The polypeptides can also be used to generate antibodies, and
XX CC both the polypeptide and antibodies are useful as components of protein
XX CC chips. The nucleic acid sequences of the invention can be used in gene
XX CC therapy. This polynucleotide sequence represents a tumour suppression
XX CC related human fukutin oligonucleotide of the invention

XX SQ Sequence 17 BP; 2 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1124 GTCCACCTTCACCTCC 1140

Db 1 GATCCACCTTGCTCC 17

RESULT 685

ABT40203
ID ABT40203 standard; DNA; 17 BP.

XX AC ABT40203;

XX DT 13-JUN-2003 (first entry)

XX DE Tumour suppression related human fukutin oligo SEQ ID No 5840.

XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.

XX OS Homo sapiens.

XX PN WO2003025175-A2.

XX PD 27-MAR-2003.

XX PF 17-SEP-2002; 2002WO-IB004208.

XX PR 17-SEP-2001; 2001FR-00011978.

XX PA (MOLE-) MOLECULAR ENGINES LAB.

XX PI Telerman A, Amson R, Tuijnder M;

XX DR WPI; 2003-313353/30.

XX PT New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.

XX PS Disclosure; Page 716; 720pp; French.

XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX CC given in the specification, a sequence containing at least 15 consecutive,
XX CC nucleotides from the 17 mer sequence, a sequence with, after optimal
XX CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX CC hybridizes to them under highly stringent conditions, or the complement
XX CC of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acids of the invention are useful as probes and primers for detecting,
XX CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX CC component of a gene chip, in vitro as (anti)sense reagents, and for
XX CC production of recombinant polypeptides. Any of the nucleic acids,
XX CC polypeptides, vectors containing the nucleic acids, cells containing the
XX CC vector or antibodies directed against the polypeptides are useful for
XX CC preparation of pharmaceuticals for prevention and/or treatment of viral
XX CC diseases that are characterised by development of tumours or cell
XX CC degeneration, specifically cancer but also Alzheimer's disease and
XX CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX CC patient samples is useful for diagnosis and/or prognosis of these
XX CC diseases. The polypeptides can also be used to generate antibodies, and
XX CC both the polypeptide and antibodies are useful as components of protein
XX CC chips. The nucleic acid sequences of the invention can be used in gene
XX CC therapy. This polynucleotide sequence represents a tumour suppression
XX CC related human fukutin oligonucleotide of the invention

XX SQ Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 916 GGCTCTTGCTTTTATC 932

Db 1 GACTTGTCTTTGTC 17

RESULT 686

SQL Sequence 17 BP; 1 A; 1 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1290 CCACAGCCACAGAGCC 1306
||||| ||||| |||||
DB 17 CCACACTCCACAGCC 1

RESULT 690

ADB04343
ID ADB04343 standard; DNA; 17 BP.

XX

AC ADB04343;

XX

DT 20-NOV-2003 (first entry)

XX

DE Human MDZ7 scanning oligonucleotide SEQ ID 5329.

XX

KW Cytostatic; immunostimulant; gene therapy; vaccine; human;

XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;

KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;

XX developmental disorder; ss.

XX

OS Homo sapiens.

XX

FN EPI281758-A2.

XX

PD 05-FEB-2003.

XX

PF 30-JUL-2002; 2002EP-00016874.

XX

PR 02-AUG-2001; 2001US-00922181.

XX

XX (AEOM-) AEOMICA INC.

XX

PI Shannon M, Gu Y, Nguyen C;

XX

XX WPI; 2003-423107/40.

DR

XX New zinc finger-containing proteins and nucleic acids, useful in

XX manufacturing a medicament for treating or preventing a disorder

XX associated with decreased or increased expression or activity of MDZ3,

XX MDZ4, MDZ7 or MDZ12, e.g. cancer.

XX

XX Example 8; SEQ ID NO 5329; 103pp; English.

XX

XX The present invention relates to novel human zinc finger-containing

XX proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is

XX encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,

XX MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome

XX 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,

XX or in manufacturing a medicament for treating or preventing a disorder

XX associated with decreased or increased expression or activity of MDZ3,

XX MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic

XX acids and proteins are also useful for diagnosing or monitoring a disease

XX caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic

XX acids can also be used as probes to detect and characterize gross

XX alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are

XX useful in constructing microarrays for measuring gene expression. The

XX proteins are useful as therapeutic agents for gene therapy or as

XX vaccines. The present sequence was used to illustrate the invention.

XX

XX SQL Sequence 17 BP; 4 A; 8 C; 2 G; 3 T; 0 U; 0 Other;

XX

XX Query Match 0.6%; Score 12.2; DB 1; Length 17;

XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;

XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

DB 1 CACTGCAGCTCCACCT 17

RESULT 691

ADB05113

ID ADB05113 standard; DNA; 17 BP.

XX

AC ADB05113;

XX

DT 20-NOV-2003 (first entry)

XX

DE Human MDZ12 scanning oligonucleotide SEQ ID 6099.

XX

KW Cytostatic; immunostimulant; gene therapy; vaccine; human;

XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;

XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;

XX developmental disorder; ss.

XX

OS Homo sapiens.

XX

FN EPI281758-A2.

XX

PD 05-FEB-2003.

XX

PF 30-JUL-2002; 2002EP-00016874.

XX

PR 02-AUG-2001; 2001US-00922181.

XX

XX (AEOM-) AEOMICA INC.

XX

PI Shannon M, Gu Y, Nguyen C;

XX

XX WPI; 2003-423107/40.

XX

XX New zinc finger-containing proteins and nucleic acids, useful in

XX manufacturing a medicament for treating or preventing a disorder

XX associated with decreased or increased expression or activity of MDZ3,

XX MDZ4, MDZ7 or MDZ12, e.g. cancer.

XX

XX Example 8; SEQ ID NO 6099; 103pp; English.

XX

XX The present invention relates to novel human zinc finger-containing

XX proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is

XX encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,

XX MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome

XX 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,

XX or in manufacturing a medicament for treating or preventing a disorder

XX associated with decreased or increased expression or activity of MDZ3,

XX MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic

XX acids and proteins are also useful for diagnosing or monitoring a disease

XX caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic

XX acids can also be used as probes to detect and characterize gross

XX alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are

XX useful in constructing microarrays for measuring gene expression. The

XX proteins are useful as therapeutic agents for gene therapy or as

XX vaccines. The present sequence was used to illustrate the invention.

XX

XX SQL Sequence 17 BP; 4 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

XX

XX Query Match 0.6%; Score 12.2; DB 1; Length 17;

XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;

XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 988 TCCATTGTTTGTGGAA 1004

||||| ||||| |||||

DB 1 TGCATTGAGTGTGGAA 17

RESULT 692

ADB04342

ID ADB04342 standard; DNA; 17 BP.

XX

AC ADB04342;


```
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5332; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1019 AAGAGGGGAGCTTGAA 1035
DB 17 AGGAGGTGGAGCTTGCA 1
RESULT 695
ADB03496
ID ADB03496 standard; DNA; 17 BP.
XX
XX ADB03496;
AC
XX
XX 20-NOV-2003 (first entry)
DT
DE Human MDZ7 scanning oligonucleotide SEQ ID 4482.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX
XX EP1281758-A2.
PN
XX
XX 05-FEB-2003.
PD
XX
XX 30-JUL-2002; 2002EP-00016874.
PF
XX
XX 02-AUG-2001; 2001US-00922181.
PR
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Shannon M, Gu Y, Nguyen C;
PI
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 620; 103pp; English.
PS
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DR WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 4482; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1107 CTTGAGTCCCGGCCCA 1123
DB 1 CTCGAGTCCCTTACCCA 17
RESULT 696
ADA99631/c
ID ADA99631 standard; DNA; 17 BP.
XX
XX ADA99631;
AC
XX
XX 20-NOV-2003 (first entry)
DT
DE Human MDZ3 scanning oligonucleotide SEQ ID 620.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX
XX EP1281758-A2.
PN
XX
XX 05-FEB-2003.
PD
XX
XX 30-JUL-2002; 2002EP-00016874.
PF
XX
XX 02-AUG-2001; 2001US-00922181.
PR
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Shannon M, Gu Y, Nguyen C;
PI
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 620; 103pp; English.
PS
```

XX The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, or MDZ12. MDZ3 is
 CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
 CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
 CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MDZ3,
 CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 XX
 SQ Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1210 CAGGGGGCTGACCCCAT 1226
 ||||| |||||
 DB 17 CAGGGGGCATCCCCCAT 1
 RESULT 697
 ADB02193/c
 ID ADB02193 standard; DNA; 17 BP.
 AC ADB02193;
 XX
 XX 20-NOV-2003 (first entry)
 DE Human MDZ4 scanning oligonucleotide SEQ ID 3179.
 XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 XX EP1281758-A2.
 XX
 XX 05-FEB-2003.
 XX
 XX 30-JUL-2002; 2002EP-00016874.
 XX
 XX 02-AUG-2001; 2001US-00922181.
 XX (AEOM-) AEOMICA INC.
 XX
 XX Shannon M, Gu Y, Nguyen C;
 XX WPI; 2003-423107/40.
 XX
 XX New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MDZ3,
 PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
 XX
 XX Example 8; SEQ ID NO 3179; 103pp; English.
 XX
 XX The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
 CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
 CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
 CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MDZ3,
 CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 XX

CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 XX
 SQ Sequence 17 BP; 8 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1125 TTCACCTTACCTTCCA 1141
 ||||| |||||
 DB 17 TTCCTCCTTACCTTCA 1
 RESULT 698
 ADA99615/c
 ID ADA99615 standard; DNA; 17 BP.
 AC ADA99615;
 XX
 XX 20-NOV-2003 (first entry)
 DE Human MDZ3 scanning oligonucleotide SEQ ID 604.
 XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 XX EP1281758-A2.
 XX
 XX 05-FEB-2003.
 XX
 XX 30-JUL-2002; 2002EP-00016874.
 XX
 XX 02-AUG-2001; 2001US-00922181.
 XX (AEOM-) AEOMICA INC.
 XX
 XX Shannon M, Gu Y, Nguyen C;
 XX WPI; 2003-423107/40.
 XX
 XX New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MDZ3,
 PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
 XX
 XX Example 8; SEQ ID NO 604; 103pp; English.
 XX
 XX The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
 CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
 CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
 CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MDZ3,
 CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 CC

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XX SQ Sequence 17 BP; 5 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1083 TCCAGGCTTCACCCCA 1099
DB 17 TTCAGGCTTAACCTCCA 1

RESULT 699
ABZ64997
ID ABZ64997 standard; RNA; 17 BP.
XX AC ABZ64997;
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNazyme substrate #454.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX PS WPI; 2003-140484/13.
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 4; Page 141; 185pp; English.
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX SQ Sequence 17 BP; 2 A; 4 C; 6 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 52.9%; Pred. No. 5.9e+02;
Matches 9; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 785 ACAGTGTGTCTCCTGT 801
DB 1 ACCAGUGUGGCGCCTGU 17

RESULT 700
ABZ62152
ID ABZ62152 standard; RNA; 17 BP.
XX AC ABZ62152;
XX DT 21-MAR-2003 (first entry)
XX DE Human H-Ras DNazyme target #943.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX PS WPI; 2003-140484/13.
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 58; Page 131; 185pp; English.
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX SQ Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e+02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1208 ATCAGGGGCTGACCCC 1224
DB 1 AUGUGGGAGCUGACCCC 17

RESULT 701
ABZ65474/C
ID ABZ65474 standard; RNA; 17 BP.
XX AC ABZ65474;
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNazyme substrate #931.
XX XX

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KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX anti-rheumatic; cancer; AIDS; ss.
OS Homo sapiens.
XX WO200297114-A2.
XX 05-DEC-2002.
XX 29-MAY-2002; 2002WO-US016840.
XX 29-MAY-2001; 2001US-0294140P.
XX 06-JUN-2001; 2001US-0296249P.
XX 10-SEP-2001; 2001US-0318471P.
XX (RIBO-) RIBOZYME PHARM INC.
PA Mcswiggen J;
XX WPI; 2003-140484/13.
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX Claim 4; Page 150; 185pp; English.
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX SQ Sequence 17 BP; 5 A; 3 C; 8 G; 0 T; 1 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 884 CCACAGTCTGTGTC 900
Db 17 CCCAGTGTCTGTCTC 1
RESULT 702
ABZ60314/C
ID ABZ60314 standard; RNA; 17 BP.
XX AC ABZ60314;
XX 21-MAR-2003 (first entry)
DE Human K-Ras DNzyme substrate #426.
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX WO200297114-A2.
XX 05-DEC-2002.
XX 29-MAY-2002; 2002WO-US016840.
XX 29-MAY-2001; 2001US-0294140P.
XX 06-JUN-2001; 2001US-0296249P.
XX 10-SEP-2001; 2001US-0318471P.
XX (RIBO-) RIBOZYME PHARM INC.
PA Mcswiggen J;
XX WPI; 2003-140484/13.
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX Claim 4; Page 150; 185pp; English.
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX SQ Sequence 17 BP; 5 A; 3 C; 8 G; 0 T; 1 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 884 CCACAGTCTGTGTC 900
Db 17 CCCAGTGTCTGTCTC 1
RESULT 703
ABZ65475/C
ID ABZ65475 standard; RNA; 17 BP.
XX AC ABZ65475;
XX 21-MAR-2003 (first entry)
DE Human HER2 DNzyme substrate #932.
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX WO200297114-A2.
XX 05-DEC-2002.
XX 29-MAY-2002; 2002WO-US016840.
XX 29-MAY-2001; 2001US-0294140P.
XX 06-JUN-2001; 2001US-0296249P.
XX 10-SEP-2001; 2001US-0318471P.
XX (RIBO-) RIBOZYME PHARM INC.
PA Mcswiggen J;
XX WPI; 2003-140484/13.
XX
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```
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX DR WPI; 2003-229207/22.
XX XX Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX PS Example 1; Page 204; 387pp; English.
XX XX The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HBV
XX CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
XX CC disclosed in the present invention
XX SQ Sequence 17 BP; 8 A; 0 C; 5 G; 0 T; 4 U; 0 Other;
XX CC Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX CC Best Local Similarity 70.6%; Pred. No. 5.9e+02;
XX CC Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
XX QY 1016 AAAAAAGAGGGGAGCTT 1032
XX DB 1 AAAAAAGAGGGGGAU 17
XX CC
XX RESULT 706
XX ACID63867
XX ID ACD63867 standard; RNA; 17 BP.
XX AC ACD63867;
XX XX 30-SEP-2003 (first entry)
XX DT HCV minus strand DNazyme substrate sequence #1282.
XX DE
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX XX
XX OS Hepatitis C virus.
XX XX
```

```
PN WO200281494-A1.
XX 17-OCT-2002.
XX PF 26-MAR-2002; 2002WO-US009187.
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX XX (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX DR WPI; 2003-229207/22.
XX XX Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX PS Claim 1; Page 297; 387pp; English.
XX XX The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HBV
XX CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
XX CC disclosed in the present invention
XX SQ Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;
XX CC Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX CC Best Local Similarity 58.8%; Pred. No. 5.9e+02;
XX CC Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;
XX QY 883 ACCACAGTGTGTGTC 899
XX DB 1 ACCUAGUCUCUUGCC 17
XX CC
XX RESULT 707
XX ACD51051/c
XX ID ACD51051 standard; RNA; 17 BP.
XX AC ACD51051;
XX XX 23-SEP-2003 (first entry)
XX DT HBV hammerhead ribozyme substrate sequence #364.
XX DE
XX XX
```

KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 XX Hepatitis B virus.
 OS
 XX WO200281494-A1.
 XX 17-OCT-2002.
 XX
 XX 26-MAR-2002; 2002WO-US009187.
 XX
 XX 26-MAR-2001; 2001US-00817879.
 XX 08-JUN-2001; 2001US-00877478.
 XX 08-JUN-2001; 2001US-0296876P.
 XX 24-OCT-2001; 2001US-0335059P.
 XX 05-DEC-2001; 2001US-0337055P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX (BLAT/) BLATT L.
 XX (MACE/) MACEJAK D.
 XX (MCSW/) MCSWIGGEN J.
 XX (MORR/) MORRISSEY D.
 XX (PAVC/) PAVCO P.
 XX (LEEP/) LEE P.
 XX (DRAP/) DRAPER K.
 XX (ROBE/) ROBERTS E.
 XX
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 XX Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 XX
 XX Novel compound useful for treating cirrhosis, liver failure,
 XX hepatocellular carcinoma, or condition associated with hepatitis C virus
 XX infection.
 XX
 XX Example 1; Page 143; 387pp; English.
 XX
 XX The present invention relates to nucleic acid molecules which modulate
 XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 XX and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
 XX inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
 XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
 XX as oligonucleotides that specifically bind the Enhancer I region of HBV
 XX DNA. The nucleic acids may be used to modulate the expression of HBV
 XX genes and HBV viral replication. Also disclosed is a method for screening
 XX compounds and/or potential therapies directed against HBV, and compounds
 XX that modulate the expression and/or replication of HCV. The compounds and
 XX methods of the invention are useful for the treatment of degenerative and
 XX disease states related to HBV and HCV infection, replication and gene
 XX expression such as cirrhosis, liver failure, and hepatocellular
 XX carcinoma. The present sequence represents a substrate for one of the HBV
 XX disclosed in the present invention
 XX
 XX Sequence 17 BP; 5 A; 1 C; 6 G; 0 T; 5 U; 0 Other;
 XX
 XX Query Match 0.6%; Score 12.2; DB 1; Length 17;
 XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 XX
 XX 828 CACGAAGTTGCTTAC 844
 XX |||||
 XX 17 CACCAATTTATGCTTAC 1

RESULT 708

ACD61716/c

ID ACD61716 standard; RNA; 17 BP.

XX ACD61716;

AC ACD61716;

XX 23-SEP-2003 (first entry)

DT

XX

DE HCV minus strand DNAzyme substrate sequence #195.

XX

XX

KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

KW RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;

KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX

OS Hepatitis C virus.

XX

XX WO200281494-A1.

PN

XX 17-OCT-2002.

XX

XX 26-MAR-2002; 2002WO-US009187.

XX

XX 26-MAR-2001; 2001US-00817879.

XX 08-JUN-2001; 2001US-00877478.

XX 08-JUN-2001; 2001US-0296876P.

XX 24-OCT-2001; 2001US-0335059P.

XX 05-DEC-2001; 2001US-0337055P.

XX

XX (RIBO-) RIBOZYME PHARM INC.

XX (BLAT/) BLATT L.

XX (MACE/) MACEJAK D.

XX (MCSW/) MCSWIGGEN J.

XX (MORR/) MORRISSEY D.

XX (PAVC/) PAVCO P.

XX (LEEP/) LEE P.

XX (DRAP/) DRAPER K.

XX (ROBE/) ROBERTS E.

XX

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

XX Draper K, Roberts E;

XX WPI; 2003-229207/22.

XX

XX Novel compound useful for treating cirrhosis, liver failure,

XX hepatocellular carcinoma, or condition associated with hepatitis C virus

XX infection.

XX

XX Claim 1; Page 278; 387pp; English.

XX

XX The present invention relates to nucleic acid molecules which modulate

XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

XX and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,

XX inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse

XX transcriptase and/or HBV reverse transcriptase primer sequences, as well

XX as oligonucleotides that specifically bind the Enhancer I region of HBV

XX DNA. The nucleic acids may be used to modulate the expression of HBV

XX genes and HBV viral replication. Also disclosed is a method for screening

XX compounds and/or potential therapies directed against HBV, and compounds

XX that modulate the expression and/or replication of HCV. The compounds and

XX methods of the invention are useful for the treatment of degenerative and

XX disease states related to HBV and HCV infection, replication and gene

XX expression such as cirrhosis, liver failure, and hepatocellular

XX carcinoma. The present sequence represents a substrate for one of the HCV

XX disclosed in the present invention

XX

XX DNzyme or minus strand DNzyme sequences disclosed in the present

XX invention

XX

```

XX SQ Sequence 17 BP; 7 A; 5 C; 4 G; 0 T; 1 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 900 CCTGGTCATTTCTTTC 916
DB 17 CCTGGTCGTTATCTGTG 1

RESULT 709
ACD63372/c
ID ACD63372 standard; RNA; 17 BP.
XX AC ACD63372;
XX 30-SEP-2003 (first entry)
XX HCV minus strand DNzyme substrate sequence #1011.
DE Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX Hepatitis C virus.
XX WO200281494-A1.
XX 17-OCT-2002.
XX 26-MAR-2002; 2002WO-US009187.
XX 26-MAR-2001; 2001US-00817879.
XX 08-JUN-2001; 2001US-00877478.
XX 08-JUN-2001; 2001US-0296876P.
XX 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MACE/) MACEJAK D.
XX (MCSW/) MCSWIGGEN J.
XX (MORR/) MORRISSEY D.
XX (PAVC/) PAVCO P.
XX (LEEP/) LEE P.
XX (DRAP/) DRAPER K.
XX (ROBE/) ROBERTS E.
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX Claim 1; Page 293; 387pp; English.
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
XX inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well

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CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV. The compounds
CC that modulate the expression and/or replication of HCV. The compounds
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNzyme or minus strand DNzyme sequences disclosed in the present
CC invention
XX
XX SQ Sequence 17 BP; 3 A; 4 C; 7 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1092 CACCCCCACCTGGCT 1108
DB 17 CACCCCCATCGTGGAT 1

RESULT 710
ACD53015
ID ACD53015 standard; RNA; 17 BP.
XX AC ACD53015;
XX 24-SEP-2003 (first entry)
XX HBV inozyme substrate sequence #586.
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
XX amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX Hepatitis B virus.
XX WO200281494-A1.
XX 17-OCT-2002.
XX 26-MAR-2002; 2002WO-US009187.
XX 26-MAR-2001; 2001US-00817879.
XX 08-JUN-2001; 2001US-00877478.
XX 08-JUN-2001; 2001US-0296876P.
XX 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MACE/) MACEJAK D.
XX (MCSW/) MCSWIGGEN J.
XX (MORR/) MORRISSEY D.
XX (PAVC/) PAVCO P.
XX (LEEP/) LEE P.
XX (DRAP/) DRAPER K.
XX (ROBE/) ROBERTS E.
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX Claim 1; Page 293; 387pp; English.
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
XX inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well

```

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PT infection.
XX
PS Example 1; Page 163; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyzyme sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e+02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCACC 1101
Db 1 CAGGGUUCACCCUCCC 17
||||| :||||| ||

RESULT 711
ACC64699/c
ID ACC64699 standard; DNA; 17 BP.
XX
AC ACC64699;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 1946.
XX
KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrénia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001FR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
WPI; 2003-333167/31.
XX
New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
PS Disclosure; Page 258; 738pp; French.
XX
The present invention relates to murine oligonucleotides (ACC62754-
XX ACC6806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX specifically cancer but also Alzheimer's disease and schizophrénia
XX
SQ Sequence 17 BP; 2 A; 2 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1289 CCCACAAGCCACAGAGC 1305
Db 17 CCCATAAGACACAGATC 1
||||| :||||| |

RESULT 712
ACC66686
ID ACC66686 standard; DNA; 17 BP.
XX
AC ACC66686;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 3933.
XX
KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrénia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001FR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
WPI; 2003-333167/31.
XX
New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
PS Disclosure; Page 490; 738pp; French.
XX
The present invention relates to murine oligonucleotides (ACC62754-
XX ACC6806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX specifically cancer but also Alzheimer's disease and schizophrénia
XX
SQ Sequence 17 BP; 2 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

QY 981 GCTCTACTCCATTCGTT 997
 Db 1 GATCTCTCCATTCGCT 17

RESULT 713
 ACC68289/c
 ID ACC68289 standard; DNA; 17 BP.
 XX AC
 AC ACC68289;
 XX AC
 DT 01-JUL-2003 (first entry)
 XX DT
 DE Murine oligonucleotide associated with tumour suppression, SEQ ID 5536.
 XX
 KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; murine;
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; ss.
 XX
 OS Mus musculus.
 XX
 PN W02003025176-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004210.
 XX
 PR 17-SEP-2001; 2001FR-00011979.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-333167/31.
 DR
 XX New isolated nucleic acid, useful for treating viral diseases associated
 XX with tumors and cell degeneration, also related polypeptides, antibodies
 XX and transfected cells.
 PT
 PT
 PT
 PT
 XX Disclosure; Page 678; 738pp; French.

XX The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 XX Sequence 17 BP; 5 A; 1 C; 6 G; 5 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1123 AGTTCACCTTCACCTC 1139
 Db 17 AATTCACCTTCAGATC 1

RESULT 714
 ACH00302
 ID ACH00302 standard; DNA; 17 BP.
 XX AC
 AC ACH00302;
 XX AC
 DT 06-NOV-2003 (first entry)
 XX
 XX

Forward primer used to make oligonucleotide tag #1 double-stranded.
 oligonucleotide tag; ss; amplicon; word; cross-hybridising; error-free;
 disease-related polynucleotide; diagnostic assay; therapeutic block;
 sequencing; primer.
 Synthetic.
 OS US2003049616-A1.
 XX
 PN 13-MAR-2003.
 XX
 PD
 XX
 PF 08-JAN-2001; 2001US-00756830.
 XX
 PR 08-JAN-2001; 2001US-00756830.
 XX
 PA (BREN/) BRENNER S.
 PA (WILL/) WILLIAMS S R.
 XX
 PI Brenner S, Williams SR;
 XX WPI; 2003-567061/53.
 DR
 XX Synthesizing a repertoire of oligonucleotide tags of a predetermined
 PT length, useful in diagnostic assays or DNA sequencing, by employing error
 PT free words or oligonucleotides selected from the same minimally cross-
 PT hybridizing set.
 PT
 XX Disclosure; Page 5; 22pp; English.

XX The invention discloses a method for synthesising a repertoire of
 CC oligonucleotide tags of a predetermined length. The method comprises
 CC providing a repertoire of oligonucleotide tag precursors in an amplicon,
 CC where the oligonucleotide tag precursors each comprises one or more words
 CC (oligonucleotides, between 3 to 14 nucleotides in length, that differ
 CC from every other member of the same set by at least 2 nucleotides), and
 CC each word is selected from the same minimally cross-hybridising set,
 CC cleaving the amplicon at a word in each of the oligonucleotide tag
 CC precursors to form one or more ligatable ends on each oligonucleotide tag
 CC precursor, ligating one or more words to the ligatable end(s) to elongate
 CC each of the oligonucleotide tag precursors, amplifying the elongated
 CC oligonucleotide tag precursors in the amplicon and then repeating these
 CC steps until a repertoire of oligonucleotide tags, having predetermined
 CC length, is formed. The method is useful for synthesising repertoires of
 CC error-free oligonucleotide tags that may be used for labelling and
 CC sorting polynucleotides, such as cDNAs or restriction fragments. The
 CC method is particularly useful in a wide variety of research, medical or
 CC industrial applications, including the identification of disease-related
 CC polynucleotides in diagnostic assays, screening for clones of novel
 CC target polynucleotides, amplification of specifically expressed genes and DNA
 CC therapeutic blocking of inappropriately expressed genes and failure
 CC sequences. Sampled and amplified tag-polynucleotide conjugates are
 CC assured of finding a tag complement with which to form a perfectly
 CC matched duplex. The sequence presented is a primer which was used to make
 CC the minimally cross-hybridising oligonucleotide tag #1 double-stranded
 XX Sequence 17 BP; 5 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1007 CGACACCTTGAAAAAGAG 1023
 Db 1 CGACACCTGCAGAGGAG 17

RESULT 715
 ADB43899
 ID ADB43899 standard; DNA; 17 BP.
 XX
 XX ADB43899;
 AC

XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX Tumour suppression/reversion associated nucleotide #4222.
XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX Homo sapiens.
OS WO2003040369-A2.
XX PN 15-MAY-2003.
XX PD 17-SEP-2002; 2002WO-IB004219.
XX PF 17-SEP-2001; 2001FR-00011981.
XX PR (MOLE-) MOLECULAR ENGINES LAB.
XX PA Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-441574/41.
XX New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX Disclosure; Page 525; 77lpp; French.
XX The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX Sequence 17 BP; 3 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 903 GGTCAATTTCTTTGGTC 919
DB 1 GATCAATTTCTTGGAC 17
RESULT 716
ADB42956/c
ID ADB42956 standard; DNA; 17 BP.
XX AC ADB42956;
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX Tumour suppression/reversion associated nucleotide #3279.
XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX Homo sapiens.
OS WO2003040369-A2.
XX PN 15-MAY-2003.
XX PD 17-SEP-2002; 2002WO-IB004219.
XX PF 17-SEP-2001; 2001FR-00011981.
XX PR (MOLE-) MOLECULAR ENGINES LAB.
XX PA Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-441574/41.
XX New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX Disclosure; Page 415; 77lpp; French.
XX The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX Sequence 17 BP; 3 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 903 GGTCAATTTCTTTGGTC 919
DB 1 GATCAATTTCTTGGAC 17
RESULT 716
ADB42956/c
ID ADB42956 standard; DNA; 17 BP.
XX AC ADB42956;
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX Tumour suppression/reversion associated nucleotide #38.

XX Tumour suppression/reversion associated nucleotide #3279.
XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX Homo sapiens.
OS WO2003040369-A2.
XX PN 15-MAY-2003.
XX PD 17-SEP-2002; 2002WO-IB004219.
XX PF 17-SEP-2001; 2001FR-00011981.
XX PR (MOLE-) MOLECULAR ENGINES LAB.
XX PA Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-441574/41.
XX New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX Disclosure; Page 415; 77lpp; French.
XX The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX Sequence 17 BP; 3 A; 6 C; 1 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1014 TGAAAAGAGGGGGAGC 1030
DB 17 TGAAAATGAGGGAGATC 1
RESULT 717
ADB39715/c
ID ADB39715 standard; DNA; 17 BP.
XX AC ADB39715;
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX Tumour suppression/reversion associated nucleotide #38.

KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 OS Homo sapiens.
 XX OS
 XX WO2003040369-A2.
 XX
 XX PD 15-MAY-2003.
 XX
 XX 17-SEP-2002; 2002WO-IB004219.
 XX
 XX 17-SEP-2001; 2001FR-00011981.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-441574/41.
 XX
 XX New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 XX Disclosure; Page 36; 771pp; French.
 XX
 XX The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 XX
 XX Sequence 17 BP; 1 A; 1 C; 8 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1289 CCCACAGCCACAGC 1305
 Db 17 CCCACACACACAGATC 1
 RESULT 718
 ADC04003
 ID ADC04003 standard; DNA; 17 BP.
 XX AC
 XX ADC04003;
 XX
 XX 18-DEC-2003 (first entry)
 DT Human Na/H exchanger-like protein 1 gene oligonucleotide #450.
 XX
 XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 KW NHPLP1; passive replacement therapy; vaccine; diagnosis.
 XX
 XX Homo sapiens.
 OS

XX EP1273660-A2.
 PN
 XX 08-JAN-2003.
 PD
 XX
 XX 25-JAN-2002; 2002EP-00001160.
 PF
 XX
 XX 30-JAN-2001; 2001WO-US000666.
 PR
 XX 23-MAY-2001; 2001US-00864761.
 PR
 XX 21-DEC-2001; 2001US-0343331P.
 PR
 XX (AEOM-) AEOMICA INC.
 PA
 XX
 XX Gu Y;
 PI
 XX WPI; 2003-302724/30.
 DR
 XX
 XX New human sodium-hydrogen exchanger like protein 1 (NHPLP1), useful as a
 PT passive replacement therapy or as a vaccine for treating or preventing
 PT disorders associated with aberrant expression or activity of human
 PT NHPLP1.
 XX
 XX Example 2; SEQ ID NO 490; 468pp; English.
 PS
 XX
 XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
 CC exchanger like protein (NHPLP1). The NHPLP1 nucleic acid molecule, NHPLP1
 CC polypeptide, an antibody against the protein or its antigen-binding
 CC fragment is useful in therapy. The NHPLP1 nucleic acid molecule, NHPLP1
 CC polypeptide and an agonist are particularly useful for manufacturing a
 CC medicament for treating or preventing a disorder associated with
 CC decreased expression or activity of human NHPLP1. The antibody or its
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing
 CC a medicament for treating or preventing a disorder associated with
 CC increased expression or activity of human NHPLP1. The NHPLP1 nucleic acid
 CC or protein is useful as passive replacement therapy, as a vaccine, or in
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 CC spanning the sequence of the human NHPLP1 gene (ADC03514).
 XX
 XX Sequence 17 BP; 3 A; 3 C; 2 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 938 TCCTCATTTGGTTTAAATG 954
 Db 1 TCCTCATTTGGTTTACTG 17
 RESULT 719
 ADC03563
 ID ADC03563 standard; DNA; 17 BP.
 XX AC
 XX ADC03563;
 XX
 XX 18-DEC-2003 (first entry)
 DT Human Na/H exchanger-like protein 1 gene oligonucleotide #10.
 XX
 XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 KW NHPLP1; passive replacement therapy; vaccine; diagnosis.
 XX
 XX Homo sapiens.
 OS
 XX EP1273660-A2.
 PN
 XX 08-JAN-2003.
 PD
 XX
 XX 25-JAN-2002; 2002EP-00001160.
 PF
 XX
 XX 30-JAN-2001; 2001WO-US000666.
 PR
 XX 23-MAY-2001; 2001US-00864761.
 PR
 XX 21-DEC-2001; 2001US-0343331P.
 PR


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XX PA (AEOM-) AEOMICA INC.
XX PI Gu Y;
XX DR WPI; 2003-302724/30.
XX PT New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
XX PT passive replacement therapy or as a vaccine for treating or preventing
XX PT disorders associated with aberrant expression or activity of human
XX PT NHEPL1.
XX PS Example 2; SEQ ID NO 50; 468pp; English.
XX CC The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
XX CC polypeptide, an antibody against the protein or its antigen-binding
XX CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
XX CC polypeptide and an agonist are particularly useful for manufacturing a
XX CC medicament for treating or preventing a disorder associated with
XX CC decreased expression or activity of human NHEPL1. The antibody or its
XX CC antigen-binding fragment, and an antagonist, are useful for manufacturing
XX CC a medicament for treating or preventing a disorder associated with
XX CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
XX CC or protein is useful as passive replacement therapy, as a vaccine, or in
XX CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX CC spanning the sequence of the human NHEPL1 gene (ADC03514).
XX SQ Sequence 17 BP; 4 A; 3 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 761 ATCAGGTTTCTTCTA 777
Db 1 ATCAGGTTTCTTCTA 17

RESULT 720
ADC04000
ID ADC04000 standard; DNA; 17 BP.
XX AC ADC04000;
XX DT 18-DEC-2003 (first entry)
XX DE Human Na/H exchanger-like protein 1 gene oligonucleotide #447.
XX KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX KW NHEPL1; passive replacement therapy; vaccine; diagnosis.
XX OS Homo sapiens.
XX PN EP1273660-A2.
XX PD 08-JAN-2003.
XX PF 25-JAN-2002; 2002EP-00001160.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 21-DEC-2001; 2001US-0343331P.
XX PA (AEOM-) AEOMICA INC.
XX PI Gu Y;
XX DR WPI; 2003-302724/30.
XX PT New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
XX PT passive replacement therapy or as a vaccine for treating or preventing
XX PT disorders associated with aberrant expression or activity of human
XX PT NHEPL1.
XX PS Example 2; SEQ ID NO 51; 468pp; English.
XX CC The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
XX CC polypeptide, an antibody against the protein or its antigen-binding
XX CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
XX CC polypeptide and an agonist are particularly useful for manufacturing a
XX CC medicament for treating or preventing a disorder associated with
XX CC decreased expression or activity of human NHEPL1. The antibody or its
XX CC antigen-binding fragment, and an antagonist, are useful for manufacturing
XX CC a medicament for treating or preventing a disorder associated with
XX CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
XX CC or protein is useful as passive replacement therapy, as a vaccine, or in
XX CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX CC spanning the sequence of the human NHEPL1 gene (ADC03514).
XX SQ Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTTGGTTTA 951
Db 1 TCCTCTTCATTTGGTTTA 17

RESULT 721
ADC03564
ID ADC03564 standard; DNA; 17 BP.
XX AC ADC03564;
XX DT 18-DEC-2003 (first entry)
XX DE Human Na/H exchanger-like protein 1 gene oligonucleotide #11.
XX KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX KW NHEPL1; passive replacement therapy; vaccine; diagnosis.
XX OS Homo sapiens.
XX PN EP1273660-A2.
XX PD 08-JAN-2003.
XX PF 25-JAN-2002; 2002EP-00001160.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 21-DEC-2001; 2001US-0343331P.
XX PA (AEOM-) AEOMICA INC.
XX PI Gu Y;
XX DR WPI; 2003-302724/30.
XX PT New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
XX PT passive replacement therapy or as a vaccine for treating or preventing
XX PT disorders associated with aberrant expression or activity of human
XX PT NHEPL1.
XX PS Example 2; SEQ ID NO 51; 468pp; English.
XX CC The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
XX CC polypeptide, an antibody against the protein or its antigen-binding
XX CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
XX CC polypeptide and an agonist are particularly useful for manufacturing a
XX CC medicament for treating or preventing a disorder associated with
XX CC decreased expression or activity of human NHEPL1. The antibody or its
XX CC antigen-binding fragment, and an antagonist, are useful for manufacturing
XX CC a medicament for treating or preventing a disorder associated with
XX CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
XX CC or protein is useful as passive replacement therapy, as a vaccine, or in
XX CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX CC spanning the sequence of the human NHEPL1 gene (ADC03514).
XX SQ Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;

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CC decreased expression or activity of human NHEP1. The antibody or its
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing
 CC a medicament for treating or preventing a disorder associated with
 CC increased expression or activity of human NHEP1. The NHEP1 nucleic acid
 CC or protein is useful as passive replacement therapy, as a vaccine, or in
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 CC spanning the sequence of the human NHEP1 gene (ADC03514).

SQ Sequence 17 BP; 4 A; 3 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 762 TGCAGGTTTCTTCTAA 778
 Db 1 TCCAGGTTTCTTCTAA 17

RESULT 722
 ADB45316
 ID ADB45316 standard; DNA; 17 BP.

XX AC ADB45316;

XX DT 18-DEC-2003 (first entry)

XX DE Tumour suppression/reversion associated nucleotide #5639.

XX KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

XX KW primer; probe; tumour suppression; tumour reversion; apoptosis;

XX KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;

XX KW diagnosis.

XX OS Homo sapiens.

XX PN WO2003040369-A2.

XX PD 15-MAY-2003.

XX PF 17-SEP-2002; 2002WO-IB004219.

XX PR 17-SEP-2001; 2001FR-00011981.

XX PA (MOLE-) MOLECULAR ENGINES LAB.

XX PI Teلمان A, Amson R, Tuijnder M;

XX DR WPI; 2003-441574/41.

XX PT New nucleic acid encoding human prostate membrane-specific antigen,
 XX useful e.g. for treatment of tumors and viral infection, also related
 XX polypeptide and antibodies.

PS Disclosure; Page 691; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can

CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

SQ Sequence 17 BP; 1 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 981 GCTCTACTCCATTGTTT 997
 Db 1 GATCTCTCCCTGTTT 17

RESULT 723
 ADE40364/C
 ID ADE40364 standard; DNA; 17 BP.

XX AC ADE40364;

XX DT 29-JAN-2004 (first entry)

XX DE Reverse Ag7016 RT-PCR primer used to amplify human NOV RNA.

XX KW NOVX; cardiac; antiarteriosclerotic; hypotensive; cytostatic; anorectic;
 KW antidiabetic; immunosuppressive; anti-HIV; neuroprotective; nootropic;
 KW antiparkinsonian; antiasthmatic; gynaecological; cardiomyopathy;
 KW atherosclerosis; hypertension; cancer; obesity; diabetes; AIDS;
 KW multiple sclerosis; graft-versus-host disease; Alzheimer's; Parkinson's;
 KW asthma; fertility disorder; vaccine; gene therapy; chromosome mapping;
 KW tissue typing; human; NOV; ss; primer; PCR; RT-PCR.

XX OS Homo sapiens.

XX PN WO2003064589-A2.

XX PD 07-AUG-2003.

XX PF 02-AUG-2002; 2002WO-US024483.

XX PR 02-AUG-2001; 2001US-0309501P.

XX PR 03-AUG-2001; 2001US-0310291P.

XX PR 07-AUG-2001; 2001US-0310544P.

XX PR 08-AUG-2001; 2001US-0310951P.

XX PR 09-AUG-2001; 2001US-0311292P.

XX PR 13-AUG-2001; 2001US-0311979P.

XX PR 16-AUG-2001; 2001US-0312892P.

XX PR 17-AUG-2001; 2001US-0313201P.

XX PR 17-AUG-2001; 2001US-0313415P.

XX PR 20-AUG-2001; 2001US-0313643P.

XX PR 20-AUG-2001; 2001US-0313702P.

XX PR 21-AUG-2001; 2001US-0314031P.

XX PR 23-AUG-2001; 2001US-0314466P.

XX PR 28-AUG-2001; 2001US-0315403P.

XX PR 29-AUG-2001; 2001US-0315853P.

XX PR 17-SEP-2001; 2001US-0322716P.

XX PR 21-SEP-2001; 2001US-0323994P.

XX PR 14-DEC-2001; 2001US-0340233P.

XX PR 05-FEB-2002; 2002US-0354591P.

XX PR 19-MAR-2002; 2002US-0365478P.

XX PR 19-APR-2002; 2002US-0373814P.

XX PR 19-APR-2002; 2002US-0373825P.

XX PR 19-APR-2002; 2002US-0373989P.

XX PR 23-APR-2002; 2002US-0374632P.

XX PR 07-JUN-2002; 2002US-0386971P.

XX PR 01-AUG-2002; 2002US-00210172.

XX (CURA-) CURAGEN CORP.

XX PI Kekuda R, Miller CE, Patturajan M, Pena CEA, Rieger DK;

XX PI Shmkeits RA, Zerhusen BD, Li L, Ji W, Padigaru M, Casman SJ;

XX PI Voss EZ, Boldog FL, Gorman L, Leite MW, Vernet CAM, Anderson DW;

PI Guo X, Zhong M, Gerlach VL, Hjalte T, Rastelli L, Spytek KA;
 PI Edinger SR, Ellerman K, Malyankar UM, Macdougall JR, Stone DJ;
 PI Alsbrook JP, Lepley DM, Burgess CE, Majumder K, Wolenc AR;
 PI Smithson G;
 XX WPI; 2003-663472/62.
 XX New NOVX polypeptides and nucleic acids, useful for preventing or
 PT treating NOVX-associated disorders, e.g. cancer, cardiomyopathy,
 PT atherosclerosis or diabetes, and in chromosome mapping, tissue typing or
 PT pharmacogenomics.
 XX Example C; SEQ ID NO 270; 560pp; English.
 XX The invention relates to a novel NOVX polypeptide. The polypeptide of the
 CC invention demonstrates cardant, antiarteriosclerotic, hypotensive,
 CC cytotatic, anorectic, antidiabetic, immunosuppressive, anti-HIV,
 CC neuroprotective, nootropic, antiparkinsonian, antiasthmatic and
 CC gynaecological activities and may be useful in diagnosing, treating or
 CC preventing NOVX-associated disorders including cardiomyopathy,
 CC atherosclerosis, hypertension, cancer, obesity, diabetes, AIDS, multiple
 CC sclerosis, graft-versus-host disease, Alzheimer's disease, Parkinson's
 CC disease, asthma or fertility disorders. Furthermore, the polypeptides may
 CC be utilised as vaccines whilst the nucleic acids may be used as
 CC hybridisation probes, in gene therapy, chromosome mapping, tissue typing,
 CC preventive medicine and pharmacogenomics. The current sequence is that of
 CC the RT-PCR primer of the invention which was used to amplify human NOV
 CC RNA.
 XX SQ Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 971 GGAAGTCCAGCTCTAC 987
 |||||
 Db 17 GGAAGTCCAGCTCTAC 1

RESULT 724
 ABT05120
 ID ABT05120 standard; DNA; 18 BP.
 XX AC ABT05120;
 XX DT 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 150.
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX human; ds.
 XX OS Homo sapiens.
 XX WO200248168-A1.
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowsett LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 560pp; English.
 XX The invention relates to a novel NOVX polypeptide. The polypeptide of the
 CC invention demonstrates cardant, antiarteriosclerotic, hypotensive,
 CC cytotatic, anorectic, antidiabetic, immunosuppressive, anti-HIV,
 CC neuroprotective, nootropic, antiparkinsonian, antiasthmatic and
 CC gynaecological activities and may be useful in diagnosing, treating or
 CC preventing NOVX-associated disorders including cardiomyopathy,
 CC atherosclerosis, hypertension, cancer, obesity, diabetes, AIDS, multiple
 CC sclerosis, graft-versus-host disease, Alzheimer's disease, Parkinson's
 CC disease, asthma or fertility disorders. Furthermore, the polypeptides may
 CC be utilised as vaccines whilst the nucleic acids may be used as
 CC hybridisation probes, in gene therapy, chromosome mapping, tissue typing,
 CC preventive medicine and pharmacogenomics. The current sequence is that of
 CC the RT-PCR primer of the invention which was used to amplify human NOV
 CC RNA.
 XX SQ Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

XX Example 18; Page 56; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX SQ Sequence 18 BP; 5 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 18;
 Best Local Similarity 82.4%; Pred. No. 7e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1416 GCTGGAGCTGCAGACG 1432
 |||||
 Db 2 GCTGGAGCTGCAGACG 18

RESULT 725
 ABT05119
 ID ABT05119 standard; DNA; 18 BP.
 XX AC ABT05119;
 XX DT 11-OCT-2002 (first entry)
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 149.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 XX human; ds.
 XX OS Homo sapiens.
 XX WO200248168-A1.
 XX 20-JUN-2002.
 XX 22-OCT-2001; 2001WO-US051224.
 XX 24-OCT-2000; 2000US-00695451.
 XX (ISIS-) ISIS PHARM INC.
 XX Baker BF, Cowsett LM, Zhang H, Dean NM;
 XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX Example 18; Page 56; 121pp; English.
 XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.

CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the INFR1 of the invention

XX
SQ Sequence 18 BP; 4 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1417 CTGGAGCTGCAGACGG 1433
|||||
Db 1 CTGGAGCTGAAGGACGG 17

RESULT 726
ABK30573
ID ABK30573 standard; DNA; 20 BP.
XX
AC ABK30573;
XX
DT 23-APR-2002 (first entry)
XX
DE Human glioma-associated oncogene-1 antisense oligonucleotide ISIS 124905.
XX
KW Human; glioma-associated oncogene-1 associated disease; infection;
KW inflammation; tumour formation; cytostatic; antiinflammatory; antisense;
KW phosphorothioate; ss.
XX
OS Homo sapiens.
XX
PN US6329203-B1.
XX
PD 11-DEC-2001.
XX
PF 08-SEP-2000; 2000US-00657042.
XX
PR 08-SEP-2000; 2000US-00657042.
XX
PS (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Wyatt J;
XX
DR WPI; 2002-138363/18.

XX Novel antisense compounds targeted to nucleic acids encoding glioma-
XX associated oncogene-1, for modulating the gene expression and treating
XX diseases associated with expression of the oncogene in humans.
XX
XX Example 15; Col 45-46; 43pp; English.
XX
XX The present invention relates to antisense compounds and methods for
XX modulating the expression of human glioma-associated oncogene-1. The
XX antisense compounds, particularly antisense oligonucleotides, target and
XX inhibit the expression of human glioma-associated oncogene-1. The
XX antisense compounds are useful for inhibiting the expression of human
XX glioma-associated oncogene-1 in human cells or tissues and for treating
XX an animal, particularly a human suspected of having or being prone to a
XX disease or condition associated with expression of glioma-associated
XX oncogene-1. The compounds are useful for diagnostics, therapeutics and as
XX research reagent, e.g. prophylactically to prevent or delay infection,
XX inflammation or tumour formation. The antisense compounds are safely and
XX effectively administered to humans. ABK30509-ABK30586 represent the
XX antisense oligonucleotides of the invention which comprise a
XX phosphorothioate backbone

XX
SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 20;
Best Local Similarity 82.4%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1677 CCCCACTTTTCTCGA 1693
|||||

Db 4 CCCCAATTTTCTCGA 20

RESULT 727
ABH72006/C
ID ABH72006 standard; DNA; 12 BP.
XX
AC ABH72006;
XX
DT 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 271985 for detecting SNP TSC0002677.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WC200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-1B000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 271985; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 3 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1129 ACCTTCACCTCC 1140
|||||

Db 12 ACCTTCACCTCC 1

RESULT 728

ABI77091
ID ABI77091 standard; DNA; 12 BP.

XX
AC ABI77091;

XX DT 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 377064 for detecting SNP TSC0006434.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 377064; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Claim 1; SEQ ID NO 377064; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Query Match 0.6%; Score 12; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 2.2e+02;
 XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1038 AACTACTACTAA 1049
 DB 1 AACTACTACTAA 12
 RESULT 729
 ABI39583/c
 ID ABI39583 standard; DNA; 12 BP.
 XX AC
 XX ABI39583;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 339556 for detecting SNP TSC0004850.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 339556; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Claim 1; SEQ ID NO 339556; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Query Match 0.6%; Score 12; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 2.2e+02;
 XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 946 GGTTTAATGTAT 957
 DB 12 GGTTTAATGTAT 1
 RESULT 730
 ABI29213/c
 ID ABI29213 standard; DNA; 12 BP.
 XX AC
 XX ABI29213;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide primer SEQ ID NO 329186 for detecting SNP TSC0034813.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 329186; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 2.2e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1038 AACTACTACTAA 1049
 Db 12 AACTACTACTAA 1

RESULT 731
 ABI42556/c
 ID ABI42556 standard; DNA; 12 BP.
 XX AC ABI42556;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide primer SEQ ID NO 342529 for detecting SNP TSC0005562.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 XX methylation status.
 XX Claim 1; SEQ ID NO 342529; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 XX and cytosine methylation status in chemically pretreated genomic DNA. The
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 XX range of diseases including immune system, gastrointestinal, respiratory,
 XX central nervous system, cardiovascular and metabolic disorders. The
 XX oligomers are also used for detecting cell type differentiation. ABC00010
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 XX represent the oligomers described in the invention. NOTE: The sequence
 XX data for this patent did not form part of the printed specification, but
 XX was obtained in electronic format from WIPO at
 XX ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 2.2e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 995 TTGTGTGGGAAT 1006
 Db 12 TTGTGTGGGAAT 1

RESULT 732
 ABH74917
 ID ABH74917 standard; DNA; 12 BP.
 XX AC ABH74917;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide primer SEQ ID NO 274904 for detecting SNP TSC0003723.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 XX methylation status.
 XX Claim 1; SEQ ID NO 274904; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 XX and cytosine methylation status in chemically pretreated genomic DNA. The
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 XX range of diseases including immune system, gastrointestinal, respiratory,
 XX central nervous system, cardiovascular and metabolic disorders. The
 XX oligomers are also used for detecting cell type differentiation. ABC00010
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 XX represent the oligomers described in the invention. NOTE: The sequence
 XX data for this patent did not form part of the printed specification, but
 XX was obtained in electronic format from WIPO at
 XX ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 5 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 2.2e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 848 AGATTGAGAAATG 859
 Db 1 AGATTGAGAAATG 12

RESULT 733
 ABH81939

```

ID ABH1939 standard; DNA; 12 BP.
XX
AC ABH1939;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 281932 for detecting SNP TSC0010165.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PF Claim 1; SEQ ID NO 281932; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 1 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 992 TTGTTTGTGGGA 1003
Db 1 TTGTTTGTGGGA 12
|||||
RESULT 734
ABH18173/c
ID ABH18173 standard; DNA; 13 BP.
XX
AC ABH18173;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 218150 for detecting SNP TSC0053036.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.

XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PF Claim 1; SEQ ID NO 218150; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 850 ATTGAGAAATGTT 861
Db 13 ATTGAGAAATGTT 2
|||||
RESULT 735
ABH27531
ID ABH27531 standard; DNA; 13 BP.
XX
AC ABH27531;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 227508 for detecting SNP TSC0055485.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
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DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 227508; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 8 C; 0 G; 1 T; 0 U; 1 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1252 CCCATCCCCAAC 1263
DB 2 CCCATCCCCAAC 13
RESULT 736
ABC68494
ID ABC68494 standard; DNA; 13 BP.
XX
AC ABC68494;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 68511 for detecting SNP TSC0017863.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
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XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
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XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 68511; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
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CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1015 GAAAAAGAGGGG 1026
DB 1 GAAAAAGAGGGG 12
RESULT 737
ABC68841
ID ABC68841 standard; DNA; 13 BP.
XX
AC ABC68841;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 68858 for detecting SNP TSC0017931.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 68858; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
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CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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XX Sequence 13 BP; 3 A; 7 C; 0 G; 2 T; 0 U; 1 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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PF 06-APR-2001; 2001WO-IB000713.
XX
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PR 07-APR-2000; 2000DE-01019173.
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XX (EPIG-) EPIGENOMICS AG.
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XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 218149; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 850 ATTGAGAATGTT 861
DB 1 ATTGAGAATGTT 12
RESULT 741
ABF84872/C
ID ABF84872 standard; DNA; 13 BP.
XX
XX AC ABF84872;
XX
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 184869 for detecting SNP TSC0045599.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 162515; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1251 CCCCATCCCCAA 1262
DB 13 CCCCATCCCCAA 2
RESULT 742
ABF62518/C
ID ABF62518 standard; DNA; 13 BP.
XX
XX AC ABF62518;
XX
XX 22-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 162515 for detecting SNP TSC0040885.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
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XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 162515; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
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CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1251 CCCCATCCCCAA 1262
DB 13 CCCCATCCCCAA 2
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CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match      0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1038 AACTACTACTAA 1049
Db 12 AACTACTACTAA 1

RESULT 743
ABC96029/c
ID ABC96029 standard; DNA; 13 BP.
XX
AC ABC96029;
XX
DT 21-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 96046 for detecting SNP TSC0023883.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 96046; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match      0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1016 AAAAAGAGGGGG 1027
Db 13 AAAAAGAGGGGG 2

RESULT 744
ABC10320
ID ABC10320 standard; DNA; 13 BP.
XX
AC ABC10320;
XX
DT 20-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 10311 for detecting SNP TSC0002623.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 10311; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match      0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 851 TTGAGATGTTA 862
Db 2 TTGAGATGTTA 13

RESULT 745
ABF57777/c
ID ABF57777 standard; DNA; 13 BP.
XX
AC ABF57777;
XX
DT 21-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 157774 for detecting SNP TSC0039739.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX

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KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
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XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
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XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 157774; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
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XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 6 C; 0 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 992 TTGTTTGTGGGA 1003
Db 13 TTGTTTGTGGGA 2
RESULT 746
ABC69670/C
ID ABC69670 standard; DNA; 13 BP.
XX
XX ABC69670;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 69687 for detecting SNP TSC0018133.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
PA
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XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 69687; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
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XX
XX Sequence 13 BP; 2 A; 0 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1251 CCCCATCCCCCAA 1262
Db 12 CCCCATCCCCCAA 1
RESULT 747
ABF21989
ID ABF21989 standard; DNA; 13 BP.
XX
XX ABF21989;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 121986 for detecting SNP TSC0030495.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
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XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
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XX Olek A, Piepenbrock C, Berlin K;
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XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 121986; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
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XX
XX Sequence 13 BP; 2 A; 0 C; 8 G; 3 T; 0 U; 0 Other;
SQ
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 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1143 CTCACCTATAC 1154
 Db 2 CTCACCTATAC 13
 |||||

RESULT 748
 ID ABF72635/C
 XX ABF72635 standard; DNA; 13 BP.

AC ABF72635;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 172632 for detecting SNP TSC0007776.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

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XX Olek A, Piepenbrock C, Berlin K;

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 XX

SQ Sequence 13 BP; 3 A; 4 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 781 GAAACGAGTGT 792
 Db 12 GAAACGAGTGT 1
 |||||

RESULT 749
 ID ABH27530/C
 XX ABH27530 standard; DNA; 13 BP.

AC ABH27530;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 227507 for detecting SNP TSC0055485.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

PA (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

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 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 1 A; 0 C; 8 G; 3 T; 0 U; 1 Other;

Query Match 0.6%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1252 CCCATCCCCAAC 1263
 Db 12 CCCATCCCCAAC 1
 |||||

RESULT 750
 ID ABC68840 standard; DNA; 13 BP.

XX

```
AC ABC68840;
XX
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 68857 for detecting SNP TSC0017931.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 68857; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Claim 1; SEQ ID NO 68857; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 7 G; 3 T; 0 U; 1 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 2.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1145 CCACCTATACCC 1156
XX Db 12 CCACCTATACCC 1
XX
XX RESULT 751
XX ABC96028
XX ID ABC96028 standard; DNA; 13 BP.
XX
XX AC ABC96028;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 96045 for detecting SNP TSC0023883.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 96045; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 2.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1016 AAAAAGAGGGGG 1027
XX Db 1 AAAAAGAGGGGG 12
XX
XX RESULT 752
XX ABF62519
XX ID ABF62519 standard; DNA; 13 BP.
XX
XX AC ABF62519;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 162516 for detecting SNP TSC0040885.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
```



```
Db      1 AACTACTACTAA 12
|||||
RESULT 755
ABF21988/c
ID ABF21988 standard; DNA; 13 BP.
XX
AC ABF21988;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 121985 for detecting SNP TSC0030495.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPiG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 121985; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1143 CTCACCTATAC 1154
|||||
Db 12 CTCACCTATAC 1
RESULT 756
ABF72634
ID ABF72634 standard; DNA; 13 BP.
XX
AC ABF72634;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 172631 for detecting SNP TSC0007776.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPiG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 121985; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1143 CTCACCTATAC 1154
|||||
Db 12 CTCACCTATAC 1
RESULT 757
ABF84873
ID ABF84873 standard; DNA; 13 BP.
XX
AC ABF84873;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 184870 for detecting SNP TSC0045599.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
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PR 07-APR-2000; 2000DE-01019173.
XX (EPIC-) EPIGENOMICS AG.
PA Olek A, Piepenbrock C, Berlin K;
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 184870; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 8 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1251 CCCATCCCCAA 1262
DB 1 CCCATCCCCAA 12
RESULT 758
ABF80384/C
ID ABF80384 standard; DNA; 13 BP.
XX
AC ABF80384;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 180381 for detecting SNP TSC0006700.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 180381; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 8 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1251 CCCATCCCCAA 1262
DB 1 CCCATCCCCAA 12
RESULT 758
ABF80384/C
ID ABF80384 standard; DNA; 13 BP.
XX
AC ABF80384;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 180381 for detecting SNP TSC0006700.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 180381; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1257 CCCCAACCCCT 1268
DB 13 CCCCAACCCCT 2
RESULT 759
ABF80385
ID ABF80385 standard; DNA; 13 BP.
XX
AC ABF80385;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 180382 for detecting SNP TSC0006700.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIC-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 180382; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
```

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XX SQ Sequence 13 BP; 3 A; 9 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1257 CCCCAAGCCCT 1268
Db 1 CCCCAAGCCCT 12

RESULT 760
ACB10321/c
ID ABC10321 standard; DNA; 13 BP.
XX ACB10321;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 10312 for detecting SNP TSC0002623.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 10312; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Claim 1; SEQ ID NO 10312; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 851 TTGAGATGTTA 862
Db 12 TTGAGATGTTA 1

RESULT 761

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ABF57776
XX ID ABF57776 standard; DNA; 13 BP.
XX ACB57776;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 157773 for detecting SNP TSC0039739.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 157773; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 1 A; 0 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 992 TTGTTTGTGGGA 1003
Db 1 TTGTTTGTGGGA 12

RESULT 762
ACD66199/c
XX ID ACD66199 standard; RNA; 13 BP.
XX ACB66199;
XX 23-SEP-2003 (first entry)
XX Anti-HCV nucleic acid molecule target sequence #152.
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
XX amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

```

KW HBV reverse transcriptase; Enhancer I region; anti-HCV;
 KW viral replication; degenerative; disease state; HBV infection;
 KW HCV infection; cirrhosis; liver failure; hepatocellular carcinoma;
 KW hepatotropic; cytostatic; virucide; antiinflammatory; target; ss.
 XX Hepatitis C virus.
 OS
 XX
 XX
 PN WO200281494-A1.
 XX
 XX
 PD 17-OCT-2002.
 XX
 XX 26-MAR-2002; 2002WO-US009187.
 XX
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 XX WPI; 2003-229207/22.
 XX
 XX
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 XX
 PS Claim 1; Page 320; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a target for one of the anti-
 CC HCV nucleic acid molecules disclosed in the present invention
 XX
 SQ Sequence 13 BP; 2 A; 2 C; 6 G; 0 T; 3 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1202 CACCCATCAGG 1213
 Db 13 CACCCATCAGG 2
 RESULT 763
 ABH43125/C
 ID ABH43125 standard; DNA; 13 BP.
 XX

AC ABH43125;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 243102 for detecting SNP TSC0059302.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX
 PN WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 243102; 29pp + Sequence Listing; German.
 PS
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 308 TGTGTGGTGGAA 319
 Db 12 TGTGTGGTGGAA 1
 RESULT 764
 ABH43124
 ID ABH43124 standard; DNA; 13 BP.
 XX
 XX ABH43124;
 AC
 XX 22-FEB-2002 (first entry)
 DT
 XX Oligonucleotide SEQ ID NO 243101 for detecting SNP TSC0059302.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX
 PN WO200177384-A2.
 XX

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XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 243101; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 308 TGTGGTGGGAA 319
DB 2 TGTGGTGGGAA 13
RESULT 765
AA65125/c
ID AAX65125 standard; RNA; 15 BP.
XX
XX AAX65125;
AC
XX
XX 20-JUL-1999 (first entry)
DE
XX Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1757.
XX
XX Arthritic condition; graft tolerance; immune response; target; cleavage;
XX hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
XX stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
XX rheumatoid arthritis; autoimmune disease; allergy; inflammation;
XX diagnosis; ss.
XX
XX Mus sp.
OS
XX WO9618736-A2.
XX
XX 20-JUN-1996.
XX
XX 22-NOV-1995; 95WO-US015516.
XX
XX 13-DEC-1994; 94US-00354920.
XX 23-DEC-1994; 94US-00363253.
XX 23-DEC-1994; 94US-00363254.
XX 17-FEB-1995; 95US-00390850.
XX 20-APR-1995; 95US-00426124.
XX 02-MAY-1995; 95US-00432874.
XX
XX
XX 04-MAY-1995; 95US-00434509.
XX 07-JUL-1995; 95US-0000951P.
XX 07-JUL-1995; 95US-0000974P.
XX 07-AUG-1995; 95US-00512861.
XX 05-OCT-1995; 95US-00541365.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
XX McSwiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
XX Karpeisky A, Thompson JD, Modak A, Burgin A;
XX
XX WPI; 1996-300653/30.
XX
XX Enzymatic nucleic acid molecules having a hammer-head motif - used for
PT the treatment of arthritis, induction of graft tolerance or treatment of
PT auto-immune diseases.
XX
XX Claim 10; Page 177; 307pp; English.
XX
XX The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
CC; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
CC can inhibit collagenase and stromelysin production in the synovial
CC membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.
CC The concentration of ribozyme required to affect a therapeutic treatment
CC is lower than that required of antisense molecules, and is highly
CC specific. The present sequence is used in the exemplification of the
CC present invention
XX
XX Sequence 15 BP; 1 A; 2 C; 3 G; 0 T; 9 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1011 ACCTGAAAAAGA 1022
DB 12 ACCTGAAAAAGA 1
RESULT 766
AA65700
ID AAX75700 standard; RNA; 15 BP.
XX
XX AAX75700;
AC
XX
XX 28-JUL-1999 (first entry)
DE
XX Human flt-1 and KDR hammerhead ribozyme target site #34.
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX foetal liver kinase 1; ss.
XX
XX Homo sapiens.
OS
XX WO9715662-A2.
XX
XX 01-MAY-1997.
XX
XX 25-OCT-1996; 96WO-US017480.
XX

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XX PR 26-OCT-1995; 95US-0005974P.
XX PR 11-JAN-1996; 96US-00584040.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR ) CHIRON CORP.
XX
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX DR WPI; 1997-259017/23.
XX
XX PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX PT rheumatoid arthritis, etc., in a human patient.
XX
XX PS Example 9; Page 192; 218pp; English.
XX
XX CC The present invention describes nucleic acid molecules which modulate the
XX CC synthesis, expression and/or stability of a mRNA encoding 1 or more
XX CC receptors of vascular endothelial growth factor (VEGF). A patient
XX CC (preferably human) having a condition associated with the level of the
XX CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX CC treated by administering the nucleic acid molecule or the expression
XX CC vector to the patient. AAX67275 to AAX75752 represent specific examples
XX CC of nucleic acid molecules from the present invention
XX
XX SQ Sequence 15 BP; 2 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 15;
Best Local Similarity 50.0%; Pred. No. 4.6e+02;
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
QY 915 TGGTCCTTTGGCT 926
Db 2 UGGUCUUGCCU 13
RESULT 767
AAZ65580
ID AAZ65580 standard; DNA; 15 BP.
AC AAZ65580;
XX
XX 30-MAR-2000 (first entry)
XX
XX Immunosuppressant inhibitor oligonucleotide VEGF-445.
XX
XX Immunosuppressant inhibitor; transforming growth factor beta; TGF beta;
XX KW vascular endothelial growth factor; VEGF; interleukin-10; IL-10; cancer;
XX KW prostaglandin E2; PGE2; immune response; tumour; asthma; Crohn's disease;
XX KW monocyte chemotactic protein-1; MCP-1; ulcerative colitis; diabetes;
XX KW glomerulonephritis; acute respiratory distress syndrome; ss;
XX KW atherosclerosis.
XX
XX OS Unidentified.
XX
XX PN WO9963975-A2.
XX
XX PD 16-DEC-1999.
XX
XX PF 10-JUN-1999; 99WO-EP004013.
XX
XX PR 10-JUN-1998; 98EP-00110709.
XX PR 25-JUL-1998; 98EP-00113974.
XX
XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
XX PI Schlingensiepen K, Schlingensiepen R, Brysch W;
XX DR WPI; 2000-097470/08.
XX
Composition containing immune stimulant and inhibitor of agent that
adversely affects the immune response, for treating cancers and
infections.
Claim 10; Fig 1; 30pp; English.
This sequence is an immunosuppressant inhibitor oligonucleotide, which is
used in the invention. The invention relates to a composition which
contains at least one inhibitor (less than 100 kD) of a substance (e.g.
transforming growth factor TGF-beta, vascular endothelial growth factor
VEGF, interleukin-10 IL-10, prostaglandin E2 PGE2, or their receptors)
that adversely affects the immune response. The composition also includes
at least one stimulant that positively affects the immune response. This
oligonucleotide is an example of an inhibitor that is used in the
composition. The composition is used as an immunostimulant for the
treatment of neoplasms and infections, particularly hyperproliferation;
leukaemia; (non-)Hodgkin's lymphoma; carcinoma (of oesophagus, bronchi,
colon-rectum, stomach, intestine, gall bladder or duct, pancreas, anus,
breast, ovary, cervix, endometrium, prostate or bladder), liver tumours,
malignant melanoma, brain tumours and sarcomas. The oligonucleotides,
most of which are directed against TGFbeta or VEGF, are inhibitors of
monocyte chemotactic protein-1 (MCP-1) and are useful as anti-
inflammatory for treating e.g. asthma, Crohn's disease, ulcerative
colitis, diabetes, glomerulonephritis, acute respiratory distress
syndrome and the formation of atherosclerotic plaque
XX
XX SQ Sequence 15 BP; 0 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 909 TTTCCTTGGCT 920
Db 2 TTTCCTTGGCT 13
RESULT 768
AAZ51932/c
ID AAZ51932 standard; DNA; 15 BP.
XX
XX AAZ51932;
XX
XX 31-OCT-2000 (first entry)
XX
XX DE Probe for P. aeruginosa muCA mutant (deletion 440).
XX
XX KW AlgU; sigma factor; SpOH; mucoidy; muCA; mucB; cystic fibrosis;
XX KW conversion; non-mucoid; probe; ss.
XX
XX OS Pseudomonas aeruginosa.
XX
XX PN US6083691-A.
XX
XX PD 04-JUL-2000.
XX
XX PF 24-NOV-1995; 95US-00505307.
XX
XX PR 12-FEB-1993; 93US-00017114.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX PI Martin DW, Deretic V;
XX DR WPI; 2000-464334/40.
XX
XX Detecting conversion to mucoidy in Pseudomonas aeruginosa having an
XX PT inactive muCA gene product, useful for detecting cystic fibrosis in
XX PT patients with chronic respiratory infection by detecting an altered
XX PT sequence in the muCA gene.
XX
XX PS Claim 6; Col 47; 50pp; English.
XX

```

CC The Pseudomonas aeruginosa *mucA* and *mucB* genes, immediately downstream of
 CC *algU*, play a role in the regulation of mucoidy. Specific sequence
 CC alterations in the *mucA* gene cause conversion from the non-mucoid to
 CC mucoid state. These alterations include deletion of nucleotide G from
 CC position 439 or 440, deletion of nucleotide A from position 371,
 CC substitution of nucleotide C from position 362 to T, or an insertion of 8
 CC nucleotides (AGGGGGC) between positions 433 and 434. These alterations
 CC give rise to frameshift deletions and duplications or nonsense mutations.
 CC Conversion to mucoidy in *P. aeruginosa* can therefore be detected by
 CC determining the presence of an inactive *mucA* gene product having an
 CC altered *mucA* gene. The method is useful for the early detection and
 CC diagnosis of the conversion to mucoidy of *P. aeruginosa*. Specifically,
 CC the method is useful for detecting the switch from non-mucoid to mucoid
 CC state in *P. aeruginosa* infecting cystic fibrosis patients. The DNA
 CC sequences are useful as probes or primers in nucleic acid hybridization,
 CC e.g. Southern or Northern blotting. The DNA sequences are also useful in
 CC analyzing the complex interaction of structural and regulatory genes in
 CC diverse microorganisms and in clinical isolates from cystic fibrosis
 CC patients

XX SQ Sequence 15 BP; 2 A; 4 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1050 GCCCTGGCCCC 1061
 |||||

Db 15 GCCCTGGCCCC 4

RESULT 769

ID AAF48241

XX AAF48241 standard; DNA; 15 BP.

AC AAF48241;

DT 30-MAR-2001 (first entry)

DE IGFBP3 oligonucleotide #1661.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

PF 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

PI Wraight CJ, Werther GA, Edmondson SR;

DR WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.

XX Example 7; Page 55; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

XX SQ Sequence 15 BP; 2 A; 7 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943
 |||||

Db 1 CCTCTCTCTTCA 12

RESULT 770

AAF48238

ID AAF48238 standard; DNA; 15 BP.

XX AAF48238;

DT 30-MAR-2001 (first entry)

DE IGFBP3 oligonucleotide #1658.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

PF 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

PI Wraight CJ, Werther GA, Edmondson SR;

DR WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.

XX Example 7; Page 55; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

SQ Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 932 CCCTCCTCTTCA 943
 Db 4 CCCTCCTCTTCA 15
 |||||

RESULT 771
 AAF48239
 ID AAF48239 standard; DNA; 15 BP.
 XX AC AAF48239;
 XX DT 30-MAR-2001 (first entry)
 XX DE IGFBP3 oligonucleotide #1659.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 XX cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 XX hyperneovascular condition; hyperplasia; kidney disease;
 XX neovascular condition of the retina; ss.

XX Homo sapiens.
 XX WO200078341-A1.
 XX PD 28-DEC-2000.
 XX PF 21-JUN-2000; 2000WO-AU000693.
 XX PR 21-JUN-1999; 99US-0140345P.
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 XX inhibits or reduces growth factor mediated cell proliferation and/or
 XX inflammation.

XX Example 7; Page 55; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 XX skin disorders. The method comprises contacting the skin with an
 XX antisense oligonucleotide, (for insulin-like Growth factor [IGF]-1
 XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 XX inhibiting or reducing growth factor mediated cell proliferation,
 XX inflammation and/or other disorders. The present sequence is an
 XX oligonucleotide which can be used to design the antisense
 XX oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

SQ Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 932 CCCTCCTCTTCA 943
 Db 3 CCCTCCTCTTCA 14
 |||||

RESULT 772
 AAF48240
 ID AAF48240 standard; DNA; 15 BP.
 XX AC AAF48240;
 XX DT 30-MAR-2001 (first entry)
 XX DE IGFBP3 oligonucleotide #1660.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 XX cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 XX hyperneovascular condition; hyperplasia; kidney disease;
 XX neovascular condition of the retina; ss.

XX Homo sapiens.
 XX WO200078341-A1.
 XX PD 28-DEC-2000.
 XX PF 21-JUN-2000; 2000WO-AU000693.
 XX PR 21-JUN-1999; 99US-0140345P.
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 XX inhibits or reduces growth factor mediated cell proliferation and/or
 XX inflammation.

XX Example 7; Page 55; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
 XX skin disorders. The method comprises contacting the skin with an
 XX antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
 XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 XX inhibiting or reducing growth factor mediated cell proliferation,
 XX inflammation and/or other disorders. The present sequence is an
 XX oligonucleotide which can be used to design the antisense
 XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
 XX F45161). The method is useful for ameliorating the effects of psoriasis,
 XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 XX hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia

XX Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 932 CCTCTCTCTCA 943
 |||||
 Db 2 CCTCTCTCTCA 13

RESULT 773
 ABK46570
 ID ABK46570 standard; DNA; 15 BP.

XX AC ABK46570;

XX DT 05-JUN-2002 (first entry)

XX DE EDG4 gene, allele specific oligonucleotide probe #1.

XX KW Endothelial differentiation lysophosphatidic acid GPCR 4; receptor;
 KW G-protein coupled receptor; EDG4; cytostatic; gene therapy;
 KW antisense gene therapy; polymorphism; haplotype; ovarian cancer;
 KW allele specific oligonucleotide; ASO; probe; ss.

XX OS Homo sapiens.

XX PN WO200212342-A2.

XX FN 14-FEB-2002.

XX PD 06-AUG-2001; 2001WO-US024649.

XX PF 04-AUG-2000; 2000US-0223177P.

XX PR (GENA-) GENAISSANCE PHARM INC.

XX PI Kazemi A, Koshy B, Sanchis A;

XX WPI; 2002-257470/30.

XX PT New endothelial differentiation, G-protein coupled receptor-4 gene (EDG4)
 PT polymorphic variants, for studying the expression and function of EDG4
 PT and screening drugs to treat ovarian cancer.

XX PS Claim 16; Page 13; 66pp; English.

CC The invention describes a polynucleotide (I) which is a polymorphic
 CC variant of a reference sequence for the endothelial differentiation,
 CC lysophosphatidic acid G-protein coupled receptor-4 (EDG4) gene, EDG4 cDNA
 CC (located on chromosome 19p12). (I) is useful for studying the expression
 CC and function of EDG4 and expressing EDG4 protein for use in screening for
 CC candidate drugs to treat diseases related to EDG4 activity. The
 CC polymorphism and haplotype data are useful for validating whether EDG4 is
 CC a suitable target for drugs to treat ovarian cancer. Establishing the
 CC EDG4 haplotype or haplotype pair of an individual is useful for improving
 CC the efficiency and reliability of discovery and development of drugs for
 CC treating diseases associated with EDG4 activity. The haplotyping method
 CC is useful to validate EDG4 as a candidate target for treating a specific
 CC condition or disease predicted to be associated with EDG4 activity and
 CC for screening for compounds targeting EDG4. A polymorphic variant of EDG4
 CC is useful in studying the effect of variation on the biological activity
 CC of EDG4, on the binding affinity of candidate drugs targeting EDG4 for
 CC the treatment of ovarian cancer. This sequence represents an allele
 CC specific oligonucleotide (ASO) probe used in identify allele of the EDG4
 CC gene

XX SQ Sequence 15 BP; 2 A; 11 C; 0 G; 1 T; 0 U; 1 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1089 CTTACACCCACCC 1102
 |||||
 Db 1 CTTACACCCACCC 14

RESULT 774
 ABL88305/C
 ID ABL88305 standard; DNA; 15 BP.

XX AC ABL88305;

XX DT 20-MAY-2002 (first entry)

XX DE Human CHRNE allele-specific oligonucleotide (ASO) primer, SEQ ID NO:39.

XX KW Human; cholinergic receptor nicotinic epsilon polypeptide; CHRNE;
 KW chromosome 17p13-12; acetylcholine receptor; AChR;
 KW neuromuscular junction; skeletal muscle; postnatal development;
 KW congenital myasthenic syndrome; CMS; haplotyping; genotyping; haplotype;
 KW genetic variant; single nucleotide polymorphism; SNP; gene therapy;
 KW drug screening; allele-specific oligonucleotide; ASO; primer; ss.

XX OS Homo sapiens.

XX PN WO200198316-A2.

XX FN 27-DEC-2001.

XX PD 20-JUN-2001; 2001WO-US019835.

XX PF 20-JUN-2000; 2000US-0212870P.

XX PR (GENA-) GENAISSANCE PHARM INC.

XX PI Amaro E, Bieganski KM, Kliem SE, Koshy B, Tanguay DA;

XX WPI; 2002-130787/17.

XX PT Novel genetic variants of cholinergic receptor, nicotinic, epsilon
 PT polypeptide gene useful in studying expression and function of the
 PT protein, and for screening drugs to treat diseases e.g. congenital
 PT myasthenic syndrome.

XX PS Claim 17; Page 14; 104pp; English.

CC The invention relates to a method for haplotyping the cholinergic
 CC receptor, nicotinic, epsilon polypeptide (CHRNE) gene (ABL88268) of an
 CC individual, and also describes 17 novel polymorphic sites within the
 CC human CHRNE gene. The CHRNE gene is located on chromosome 17p13-12 and
 CC contains 12 exons which encode a 493 amino acid protein (AB049112). The
 CC CHRNE protein is one of the 5 subunits of mammalian acetylcholine
 CC receptors (AChRs) found at neuromuscular junctions in juveniles and
 CC adults, and is essential for the normal postnatal development of skeletal
 CC muscle. Mutations in the CHRNE gene are associated with congenital
 CC myasthenic syndrome (CMS). CHRNE gene sequences can therefore be used in
 CC gene therapy. The CHRNE gene is also useful for studying the expression
 CC and function of CHRNE, and in expressing CHRNE protein for use in
 CC screening for candidate drugs to treat diseases related to CHRNE. The
 CC method of the invention is useful for haplotyping the CHRNE gene in an
 CC individual, and can also be used in pharmaceutical research to validate
 CC candidate drugs for, treating a specific condition drugs or disease
 CC predicted to be associated with CHRNE activity such as CMS. Polymorphisms
 CC in the target region may be determined by the use of allele-specific
 CC oligonucleotides (ASOs; ABL88370-ABL88320) as probes and primers, and by
 CC primer extension using oligonucleotide primers comprising sequences
 CC ABL88371-ABL88354. The CHRNE protein is useful for improving the
 CC efficiency and reliability of several steps in the discovery and

CC development of drugs for treating diseases associated with CHRNE
 CC activity, and may be used to screen drugs which target CHRNE. Sequences
 CC AB188287-ABL8320 represent specifically claimed allele-specific
 CC oligonucleotide (ASO) primers used for detecting polymorphisms in the
 CC CHRNE gene

XX Sequence 15 BP; 2 A; 0 C; 9 G; 3 T; 0 U; 1 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. NO. 4.6e-02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1250 ACCCATCCCAAC 1263
 :|||||
 Db 14 MCCCTTCCCAAC 1

RESULT 775

ABK85664/C

ID ABK85664 standard; DNA; 15 BP.

XX AC ABK85664;

XX 15-AUG-2002 (first entry)

XX Human SCYB6 gene polymorphism detection ASO primer #3.

XX Human; small inducible cytokine subfamily B (Cys-X-Cys);

XX Member 6 (granulocyte chemotactic protein 2); SCYB6; primer; ss;

XX inflammatory disorder; cancer; antiinflammatory; cytostatic;

XX gene therapy; SCYB6 isogene expression modulator; ASO; SNP;

XX allele-specific oligonucleotide; single nucleotide polymorphism.

XX Homo sapiens.

XX WO200227030-A1.

XX 04-APR-2002.

XX 27-SEP-2001; 2001WO-US030413.

XX 27-SEP-2000; 2000US-0235809P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Anastasio AE, Bentivegna SC, Choi JY, Monroe G, Russo DP;

XX WPI; 2002-405057/43.

XX Claim 14; Page 12; 71pp; English.

XX The present invention relates to a new polynucleotide having small

XX inducible cytokine subfamily B (Cys-X-Cys), Member 6 (granulocyte

XX chemotactic protein 2) (SCYB6) isogene. The invention is useful for

XX studying expression and function of SCYB6 and expressing SCYB6 protein

XX for use in screening for candidate drugs to treat diseases related to

XX SCYB6 activity. The polymorphism and haplotype data is useful for

XX validating whether SCYB6 is a suitable target for drugs to inflammatory

XX disorders and cancer, screening for such drugs and reducing bias in

XX clinical trials of such drugs. The invention is also useful for

XX therapeutic purposes. The method of the invention is useful for

XX identifying an association between susceptibility to a disease, staging

XX of a disease, or response to a drug. The present nucleic acid sequence

XX represents one of a collection of allele-specific oligonucleotide (ASO)

XX primers (ABK85662-ABK85679) that were used in the invention to detect

XX polymorphisms in the human SCYB6 gene

XX Sequence 15 BP; 4 A; 5 C; 4 G; 1 T; 0 U; 1 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;

Best Local Similarity 85.7%; Pred. NO. 4.6e-02;

Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1099 ACCCTGGGCTTCAG 1112

:|||||

Db 14 MCCCTGGGCTTCAG 1

RESULT 776

AAS96179

ID AAS96179 standard; DNA; 15 BP.

XX AC AAS96179;

XX 26-FEB-2002 (first entry)

XX Human Acetylcholinesterase gene allele specific primer #26.

XX Human; ss; PCR primer; allele specific oligonucleotide; ASO; ACHE;

XX acetylcholinesterase; polymorphic variant; haplotyping; genotyping;

XX neurological disease; Parkinson's disease; Alzheimer's disease; cancer;

XX leukaemia; tumour; chromosome 7q22.

XX Homo sapiens.

XX WO200179219-A2.

XX 25-OCT-2001.

XX 11-APR-2001; 2001WO-US011853.

XX 14-APR-2000; 2000US-0197173P.

XX (GENA-) GENAISSANCE PHARM INC.

XX (KAZE/) KAZEMI A.

XX Bentivegna SC, Chew A, Choi JY, Koshy B;

XX WPI; 2002-055248/07.

XX New polymorphic variants comprising acetylcholinesterase (ACHE) isogene,

XX useful in expressing ACHE protein for use in screening for candidate

XX drugs to treat diseases related to ACHE activity, e.g. neurological

XX diseases or cancer.

XX Claim 16; Page 13; 79pp; English.

XX The invention relates to a polynucleotide comprising a polymorphic

XX variant of an acetylcholinesterase (ACHE) gene or fragment, protein or

XX complement, the variant comprising an ACHE isogene defined by a haplotype

XX selected from haplotypes 1-20 listed in the specification. Also included

XX are methods for haplotyping and genotyping the ACHE gene of an

XX individual, a method for predicting a haplotype pair for the ACHE gene of

XX an individual, a method for identifying an association between a trait

XX and at least one haplotype or haplotype pair of ACHE gene, recombinant

XX nonhuman organisms transformed or transfected with the polynucleotide

XX where the organism expresses ACHE protein encoded by the first nucleotide

XX sequence or encoded by the polymorphic variant sequence, an isolated

XX antibody specific for and immunoreactive with ACHE, a method of screening

XX for drugs targeting the polypeptide contacting ACHE polymorphic variant

XX with a candidate agent and assaying for binding activity, a computer

XX system for storing and analysing polymorphism data for ACHE gene and a

XX genome anthology for ACHE gene which comprises ACHE isogenes defined by

XX haplotypes 1-20 given in the specification. The polymorphisms are useful

XX for studying the biological function of ACHE as well as in identifying

XX drugs targeting this protein for the treatment of disorder related to its

XX abnormal expression or function. The polymorphic variants may also be

XX used in screening for compounds targeting ACHE to treat a specific

XX condition or disease predicted to be associated with ACHE activity e.g.

XX neurological diseases (e.g. Parkinson's disease and Alzheimer's disease),

XX cancer, leukaemia, and tumours. The ACHE gene maps to human chromosome

XX 7q22. The present sequence is an allele specific oligonucleotide (ASO)

CC PCR primer used to detect the polymorphic ACHE variants of the invention
 XX
 SQ Sequence 15 BP; 2 A; 10 C; 1 G; 1 T; 0 U; 1 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1252 CCATCCCAACCC 1265
 |||||
 2 CCCATCCCAACCC 15
 Db
 RESULT 777
 AAS99989/c
 ID AAS99989 standard; DNA; 15 BP.
 XX
 AC AAS99989;
 XX
 DT 12-MAR-2002 (first entry)
 XX
 DE Human NPR1 gene allele-specific oligonucleotide sequencing primer #10.
 XX
 KW Human; natriuretic peptide receptor A/guanylate cyclase A; NPR1; ss;
 KW atrionatriuretic peptide receptor A; haplotyping; cytostatic; genotyping;
 KW haplotype pair; single nucleotide polymorphism; gene therapy; PCR primer;
 KW drug screening; hypertension; hypotensive; sequencing primer; probe.
 XX
 OS Homo sapiens.
 XX
 PN WO200179231-A2.
 XX
 PD 25-OCT-2001.
 XX
 PF 16-APR-2001; 2001WO-US012300.
 XX
 PR 14-APR-2000; 2000US-0197330P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Bentivegna SC, Choi JY, Kliem SE, Nandabalan K;
 XX
 DR WPI; 2002-066340/09.
 XX
 PT Genotyping human natriuretic peptide receptor A/guanylate cyclase gene of
 PT an individual, involves determining identity of nucleotide pair at
 PT specific polymorphic sites for two copies of the gene.
 XX
 PS Claim 15; Page 14; 96pp; English.
 XX
 CC The invention relates to single nucleotide polymorphisms in the gene
 CC encoding the human natriuretic peptide receptor A/guanylate cyclase A
 CC (atrionatriuretic peptide receptor A) or NPR1 polypeptide. A method for
 CC haplotyping the NPR1 gene in an individual comprises identifying the
 CC nucleotide at one or more polymorphic sites and determining whether one
 CC of the copies of the gene is defined by one of the NPR1 haplotypes given
 CC in the specification or whether both copies are defined by a haplotype
 CC pair. This method is useful in genotyping, whereby all possible haplotype
 CC pairs can be assigned to specific genotypes. An association between a
 CC trait and a haplotype or haplotype pair of the NPR1 gene can be
 CC identified by comparing the frequency of the haplotype pair of the NPR1 gene in
 CC a population exhibiting the trait with the frequency of the haplotype pair
 CC or haplotype pair in a reference population, where a higher haplotype
 CC frequency in the trait population indicates the trait is associated with
 CC the haplotype or haplotype pair. NPR1 and its corresponding DNA are used
 CC for studying the expression and function of NPR1, for use in screening
 CC for candidate drugs to treat diseases related to NPR1 activity, such as
 CC hypertension. The sequences are also useful for studying the effect of
 CC variation on the biological activity of NPR1 as well as on the binding
 CC affinity of candidate drugs targeting NPR1. Sequences AAS99959-AAS99990
 CC and ABX09390-ABX09462 represent probes, sequencing primers and PCR
 CC primers used to detect NPR1 gene polymorphisms
 XX

SQ Sequence 15 BP; 4 A; 6 C; 4 G; 0 T; 0 U; 1 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1100 CCTGGGCTTCAGT 1113
 |||||
 15 CSCTGGGCTTCGGT 2
 Db
 RESULT 778
 ABL91842/c
 ID ABL91842 standard; DNA; 15 BP.
 XX
 AC ABL91842;
 XX
 DT 11-JUL-2002 (first entry)
 XX
 DE Human LIPG gene allele specific oligonucleotide primer 21.
 XX
 KW Human; ss; allele specific oligonucleotide; primer;
 KW single nucleotide polymorphism; SNP; lipase endothelial isogene; LIPG;
 KW drug screening; atherosclerosis; cardiovascular disorder;
 KW LIPG haplotyping; LIPG genotyping.
 XX
 OS Homo sapiens.
 XX
 PN WO200216397-A2.
 XX
 PD 28-FEB-2002.
 XX
 PF 17-AUG-2001; 2001WO-US026639.
 XX
 PR 25-AUG-2000; 2000US-0227825P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Duda A, Kazemi A, Kliem SE, Messer C;
 XX
 DR WPI; 2002-292055/33.
 XX
 PT Novel genetic variants of Lipase, Endothelial isogenes, useful for
 PT improving efficiency and reliability in drug development for treating
 PT diseases associated with LIPG activity, e.g. atherosclerosis.
 XX
 PS Claim 16; Page 14; 134pp; English.
 XX
 CC The invention comprises the DNA and amino acid sequence of the human
 CC lipase, endothelial (LIPG) isogene. Specifically, the invention relates
 CC to the discovery of 20 novel polymorphic sites within the LIPG gene. The
 CC LIPG coding sequence and protein are useful for screening drugs that can
 CC be used to treat atherosclerosis and other cardiovascular disorders. The
 CC LIPG coding sequence can also be used to haplotype and genotype the LIPG
 CC gene of an individual. The DNA sequences ABL91822 - ABL91861 represent
 CC LIPG gene allele specific oligonucleotide primers
 XX
 SQ Sequence 15 BP; 3 A; 5 C; 4 G; 2 T; 0 U; 1 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 894 GTTGCCCTGGTCA 907
 |||||
 15 GRTGACCTGGTCA 2
 Db
 RESULT 779
 ABK54342
 ID ABK54342 standard; DNA; 15 BP.
 XX
 AC ABK54342;

XX 18-JUN-2002 (first entry)
 XX Human SCYA26 gene allele-specific oligonucleotide sequencing primer #19.
 DE Human; small inducible cytokine subfamily A (Cys-Cys) member 26; SCYA26;
 DE respiratory inflammatory disease; single nucleotide polymorphism; ss;
 KW haplotyping; haplotype pair; gene therapy; antiinflammatory; respiratory;
 KW sequencing; primer.
 XX Homo sapiens.
 OS WO200216400-A2.
 PN 28-FEB-2002.
 XX 27-AUG-2001; 2001WO-US026664.
 XX 25-AUG-2000; 2000US-0227965P.
 XX (GENA-) GENAISSANCE PHARM INC.
 PA Bieglecki KM, Han J, Kliem SE, Sausker EA;
 PI WPI; 2002-280908/32.
 XX Novel isolated polynucleotide which is a polymorphic variant of small
 PT inducible cytokine subfamily A (Cys-Cys), member 26 (SCYA26) gene useful
 PT for expressing SCYA26 protein isoform used in drug screening techniques.
 PS Claim 16; Page 13; 79pp; English.
 XX The invention relates to single nucleotide polymorphisms in the gene
 CC encoding human small inducible cytokine subfamily A (Cys-Cys) member 26
 CC (SCYA26). A method for haplotyping the SCYA26 gene in an individual
 CC comprises identifying the nucleotide at one or more polymorphic sites and
 CC determining whether one of the copies of the gene is defined by one of
 CC the SCYA26 haplotypes given in the specification or whether both copies
 CC are defined by a haplotype pair. This method is useful in genotyping,
 CC whereby all possible haplotype pairs can be assigned to specific
 CC genotypes. An association between a trait and a haplotype or haplotype
 CC pair of the SCYA26 gene can be identified by comparing the frequency of
 CC the haplotype or haplotype pair in a population exhibiting the trait with
 CC the frequency of the haplotype or haplotype pair in a reference
 CC population, where a higher haplotype frequency in the trait population
 CC indicates the trait is associated with the haplotype or haplotype pair.
 CC SCYA26 and its corresponding DNA are used for studying the expression and
 CC diseases related to SCYA26 activity, such as respiratory inflammatory
 CC diseases. The sequences are also useful for studying the effect of
 CC variation on the biological activity of SCYA26 as well as on the binding
 CC affinity of candidate drugs targeting SCYA26. Sequences ABK54324-ABK54343
 CC represent allele-specific oligonucleotide sequencing primers used for
 CC detecting SCYA26 gene polymorphisms
 XX
 SQ Sequence 15 BP; 2 A; 9 C; 2 G; 1 T; 0 U; 1 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1256 TCCCAACCCCC 1267
 |||||
 Db 2 TCCCAACCCCC 13
 RESULT 780
 ABX01735
 ID ABX01735 standard; RNA; 15 BP.
 XX
 AC ABX01735;
 XX
 DT 23-DEC-2002 (first entry)

XX Hepatitis C virus (HCV) ribozyme related RNA sequence #4.
 DE Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
 KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
 KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
 KW type I interferon; interferon alpha; interferon beta; cytosolic; ss;
 KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory.
 XX Unidentified.
 OS US2002082225-A1.
 PN 27-JUN-2002.
 XX 23-MAR-1999; 99US-00274553.
 XX 23-MAR-1999; 99US-00274553.
 XX (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J A.
 PA (ROBE/) ROBERTS B.
 PA (PAVC/) PAVCO P A.
 PA (MACE/) MACEJACK D.
 XX Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
 PI WPI; 2002-617759/66.
 XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral
 PT replication and are useful to treat hepatitis C virus infections and
 PT cirrhosis, liver failure or hepatocellular carcinoma.
 PS Disclosure; SEQ ID NO 1517; 80pp; English.
 XX The present invention relates to enzymatic nucleic acids which
 CC specifically cleave RNA derived from Hepatitis C virus (HCV). The
 CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
 CC (HP) motif where the binding arms comprise sequences complementary to one
 CC of the substrate sequences defined in the specification. The HCV
 CC ribozymes are useful for modulating the expression and/or replication of
 CC HCV. They can be used to treat cirrhosis, liver failure and/or
 CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating
 CC a condition associated with HCV infection in conjunction with one or more
 CC other drug therapies, particularly type I interferon, especially
 CC interferon alpha, beta or gamma or consensus interferon. The present
 CC sequence represents a RNA sequence of unknown function. Note: The present
 CC sequence is given in the sequence data but is not mentioned elsewhere in
 CC the specification. The complete sequence data for this patent was
 CC obtained in electronic format directly from the USPTO web site at
 CC seqdata.uspto.gov/psipdbEntry.html
 XX
 SQ Sequence 15 BP; 4 A; 6 C; 3 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 83.3%; Pred. No. 4.6e+02;
 Matches 10; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 Qy 1202 CACCCTATCAGG 1213
 |||||
 Db 2 CACCCTATCAGG 13
 RESULT 781
 AAL39492/C
 ID AAL39492 standard; DNA; 15 BP.
 XX
 AC AAL39492;
 XX
 DT 05-SEP-2002 (first entry)
 XX CCBP2 detecting ASO primer SEQ ID No 19.
 XX

KW Chemokine binding protein 2; CCBP2; CCBP2 protein isoform; gene therapy;
 KW polymorphic gene variant; single nucleotide polymorphism; human; primer;
 KW PCR; ss.
 XX Homo sapiens.
 XX WO200232926-A2.
 XX 25-APR-2002.
 XX 12-OCT-2001; 2001WO-US042685.
 XX 12-OCT-2000; 2000US-0239638P.
 XX (GENA-) GENAISANCE PHARM INC.
 XX Armstrong B, Kazemi A, Koshy B;
 XX WPI; 2002-435524/46.
 XX New genetic variants having polymorphisms in the chemokine binding
 PT protein 2 (CCBP2) gene, useful for studying CCBP2 functions, and for
 PT treating disorders affected by expression or function of the CCBP2
 PT isogene.
 XX Claim 14; Page 13; 84pp; English.
 XX The invention relates to an isolated polynucleotide comprising genes and
 CC haplotypes of the chemokine binding protein 2 (CCBP2) gene. Polymorphic
 CC variants of the CCBP2 gene are useful in studying the expression and
 CC function of CCBP2, and in expressing CCBP2 proteins for use in screening
 CC candidate drugs for treating diseases associated with CCBP2 activity.
 CC Polynucleotides comprising a polymorphic gene variant or fragment may be
 CC used for therapeutic purposes, where a patient could benefit from
 CC expression or increased expression of a particular CCBP2 protein isoform,
 CC or an expression vector encoding the isoform may be administered to the
 CC patient. Haplotype information is useful in improving the efficiency and
 CC output of several steps in drug discovery and development process,
 CC including target validation, identifying lead compounds, and early phase
 CC clinical trials. The polynucleotides of the invention can be used to
 CC treat disorders related to the CCBP2 gene by gene therapy. This
 CC polynucleotide sequence represents a preferred ASO primer for detecting
 CC CCBP2 gene polymorphisms relating to the invention
 XX
 SQ Sequence 15 BP; 6 A; 4 C; 2 G; 2 T; 0 U; 1 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 760 CATGCAGGTTCTT 773
 Db |:|||||||
 15 CRTGCAGGTTGTT 2
 RESULT 782
 ACD66205/C
 ID ACD66205 standard; RNA; 15 BP.
 XX
 AC ACD66205;
 XX
 XX 23-SEP-2003 (first entry)
 XX
 DE Anti-HCV nucleic acid molecule target sequence #158.
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNase; zinnzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; anti-HCV;
 KW viral replication; degenerative; disease state; HBV infection;
 KW HCV infection; cirrhosis; liver failure; hepatocellular carcinoma;
 KW hepatotropic; cytostatic; virucide; antiinflammatory; target; ss.

XX Hepatitis C virus.
 OS WO200281494-A1.
 XX 17-OCT-2002.
 XX 26-MAR-2002; 2002WO-US009187.
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEBP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX Claim 1; Page 320; 387pp; English.
 PS The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNase, zinnzyme,
 CC inozymes, zinnzyme, amberyne, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a target for one of the anti-
 CC HCV nucleic acid molecules disclosed in the present invention
 XX
 SQ Sequence 15 BP; 2 A; 3 C; 6 G; 0 T; 4 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1202 CACCTATCAGG 1213
 Db |||||
 14 CACCTATCAGG 3
 RESULT 783
 ACD66281
 ID ACD66281 standard; RNA; 15 BP.
 XX
 AC ACD66281;
 XX
 XX 23-SEP-2003 (first entry)
 XX

Anti-HCV nucleic acid molecule target sequence #199.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
RNA stability; RNA expression; RNA synthesis; antisense;
enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; zincyme;
amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
HBV reverse transcriptase; Enhancer I region; anti-HCV;
viral replication; degenerative; disease state; HBV infection;
HCV infection; cirrhosis; liver failure; hepatocellular carcinoma;
hepatotropic; cytostatic; virucide; antiinflammatory; target; ss.

Hepatitis C virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-02968762.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEF/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure,
hepatocellular carcinoma, or condition associated with hepatitis C virus
infection.

Claim 1; Page 321; 387pp; English.

The present invention relates to nucleic acid molecules which modulate
the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
inozymes, zinczymes, amberzymes, and G-cleaver ribozymes. Also disclosed
are nucleic acid decoy molecules and aptamers that bind to HBV reverse
transcriptase and/or HBV reverse transcriptase primer sequences, as well
as oligonucleotides that specifically bind the Enhancer I region of HBV
DNA. The nucleic acids may be used to modulate the expression of HBV
genes and HBV viral replication. Also disclosed is a method for screening
compounds and/or potential therapies directed against HBV, and compounds
that modulate the expression and/or replication of HCV. The compounds and
methods of the invention are useful for the treatment of degenerative and
disease states related to HBV and HCV infection, replication and gene
expression such as cirrhosis, liver failure, and hepatocellular
carcinoma. The present sequence represents a target for one of the anti-
HCV nucleic acid molecules disclosed in the present invention

Sequence 15 BP; 4 A; 6 C; 3 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;

Best Local Similarity 83.3%; Pred. No. 4.6e+02;

Matches 10; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1202 CACCTATCAGG 1213

Db 1 CACCUAUCAGG 12

RESULT 784

AAT56226/c

ID AAT56226 standard; RNA; 15 BP.

AC AAT56226;

XX 25-MAR-2003 (revised)

DT 14-MAY-1997 (first entry)

XX Mouse TNF-a hammerhead ribozyme target sequence (nt position 672).

DE Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;

XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;

KW intercellular adhesion molecule; rel A; tumour necrosis factor;

KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;

KW translocation; chronic myelogenous leukaemia; CML; cancer;

KW Philadelphia chromosome; inflammation; autoimmune disease;

KW atherosclerosis; myocardial infarction; stroke; restenosis;

KW transplant rejection; rheumatoid arthritis; psoriasis;

KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;

KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

ss.

XX Mus musculus.

OS WO9523225-A2.

XX 31-AUG-1995.

PF 23-FEB-1995; 95WO-IB000156.

XX 23-FEB-1994; 94US-00201109.

PR 29-MAR-1994; 94US-00218934.

PR 07-APR-1994; 94US-0022795.

PR 15-APR-1994; 94US-00224483.

PR 15-APR-1994; 94US-00227958.

PR 15-APR-1994; 94US-00228041.

PR 18-MAY-1994; 94US-00245736.

PR 15-AUG-1994; 94US-00271280.

PR 16-AUG-1994; 94US-00291433.

PR 17-AUG-1994; 94US-00292620.

PR 19-AUG-1994; 94US-00293520.

PR 02-SEP-1994; 94US-00300000.

PR 08-SEP-1994; 94US-00303039.

PR 23-SEP-1994; 94US-00311486.

PR 28-SEP-1994; 94US-00311749.

PR 03-OCT-1994; 94US-00314397.

PR 07-OCT-1994; 94US-00316771.

PR 11-OCT-1994; 94US-00319492.

PR 04-NOV-1994; 94US-00321993.

PR 10-NOV-1994; 94US-00334847.

PR 28-NOV-1994; 94US-00337608.

PR 16-DEC-1994; 94US-00345516.

PR 23-DEC-1994; 94US-00357577.

PR 30-JAN-1995; 94US-00363233.

XX (RIBO-) RIBOZYME PHARM INC.

XX Stinchcomb DT, Chowrira B, Dizenzo A, Draper KG, Dudycz LW;

PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;

PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

PI Tracz D, Usman N, Wincott FE, Woolf T;

XX WPI; 1995-351090/45.

XX Ribozymes having modified bases and methods for producing them - for use

PT in inhibiting disease related genes.

XX Claim 2; Page 251; 407pp; English.

XX CC The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
 CC the nucleotide base position indicated in the DE line. Regions of the
 CC mRNA that do not form secondary folding structures and that contain
 CC potential hammerhead and hairpin ribozyme cleavage sites were identified
 CC by computer analysis. Ribozymes directed against these mRNA sequences
 CC were designed and synthesised with modifications that improve their
 CC nuclease resistance. The ribozymes are designed to cleave the target
 CC sequences and thereby inhibit TNF-alpha expression, making them
 CC potentially useful for treating rheumatoid arthritis, septic shock and
 CC other inflammatory disorders including psoriasis, as well as for
 CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
 XX SQ Sequence 15 BP; 1 A; 8 C; 2 G; 0 T; 4 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 71 GCAGAGAGGAGG 82
 Db 13 GCAGAGAGGAGG 2
 RESULT 785
 AAQ42918
 ID AAQ42918 standard; DNA; 17 BP.
 XX AC
 XX AAQ42918;
 DT 07-OCT-1993 (first entry)
 XX DE
 DE HLA type analysis method DPB1 primer PBFL.
 XX Human leukocyte antigen; HLA classII gene; DNA polymerase method; ss.
 KW Synthetic.
 OS JP05111490-A.
 XX FN
 XX JP05111490-A.
 PD 07-MAY-1993.
 XX PF
 PF 02-MAR-1992; 92JP-00044935.
 XX PR
 PR 29-AUG-1991; 91JP-00244530.
 XX PA
 PA (SUMQ) SUMITOMO METAL IND LTD.
 XX DR
 DR WPI; 1993-184838/23.
 XX FT
 FT HLA type analysis method and its reagents - includes e.g. amplification
 PT of HLA class II gene, digestion by restriction enzyme, electrophoresis
 PT and detection.
 XX PS
 PS Example; Page 18; 21pp; Japanese.
 XX CC
 CC The sequence is that of DPB1 primer PBFL which was used as part of a
 CC method of HLA type analysis involving amplification of a HLA class II
 CC gene, or fragments of it, using 2 or more kinds of primers by the DNA
 CC polymerase method and subsequent restriction enzyme digestion and
 CC analysis. The method enables easier analysis of HLA type
 XX SQ Sequence 17 BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 6.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1182 TCCCGCGCAGAGA 1193
 Db 1 TCCCGCGCAGAGA 12

RESULT 786
 AAX68749
 ID AAX68749 standard; RNA; 17 BP.
 XX AC
 XX AAX68749;
 DT 28-JUL-1999 (first entry)
 XX DE
 DE Human flt1 VEGF receptor hammerhead ribozyme substrate #44.
 XX KW
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW XDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX OS
 OS Homo sapiens.
 XX FN
 FN WO9715662-A2.
 PD 01-MAY-1997.
 XX PF
 PF 25-OCT-1996; 96WO-US017480.
 XX PR
 PR 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX PA
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX PI
 PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 DR WPI; 1997-259017/23.
 XX PT
 PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX PS
 PS Claim 4; Page 48; 218pp; English.
 XX CC
 CC The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase-1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 XX SQ Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 17;
 Best Local Similarity 50.0%; Pred. No. 6.6e+02;
 Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
 QY 915 TGGTCTTGCT 926
 Db 5 UGGUCUUUGCCU 16
 RESULT 787
 AAX68750
 ID AAX68750 standard; RNA; 17 BP.
 XX AC
 XX AAX68750;
 DT 28-JUL-1999 (first entry)
 XX DE
 DE Human flt1 VEGF receptor hammerhead ribozyme substrate #45.

KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX
 OS Homo sapiens.
 XX
 XX
 PN WO9715662-A2.
 XX
 PD 01-MAY-1997.
 XX
 XX
 XX 25-OCT-1996; 96WO-US017480.
 XX
 XX 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX WPI; 1997-259017/23.
 DR
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX
 XX Claim 4; Page 48; 218pp; English.
 PS
 XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 XX
 SQ Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 17;
 Best Local Similarity 50.0%; Pred. No. 6.6e+02;
 Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
 QY 915 TGGTCTTTCCT 926
 Db :||:|||||
 3 UGGUCUUGCCU 14
 RESULT 788
 AAX69219/c
 ID AAX69219 standard; RNA; 17 BP.
 XX
 AC AAX69219;
 XX
 DT 28-JUL-1999 (first entry)
 XX
 DE Human flt1 VEGF receptor hammerhead ribozyme substrate #514.
 XX
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO9715662-A2.
 XX
 PD 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.
 PF
 XX 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX WPI; 1997-259017/23.
 DR
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX
 XX Claim 4; Page 62; 218pp; English.
 PS
 XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient
 CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 XX
 SQ Sequence 17 BP; 3 A; 3 C; 2 G; 0 T; 9 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 6.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 805 AACTGTAAGAAA 816
 Db |||||
 17 AACTGTAAGAAA 6
 RESULT 789
 AAX69221/c
 ID AAX69221 standard; RNA; 17 BP.
 XX
 AC AAX69221;
 XX
 DT 28-JUL-1999 (first entry)
 XX
 DE Human flt1 VEGF receptor hammerhead ribozyme substrate #516.
 XX
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO9715662-A2.
 XX
 PD 01-MAY-1997.
 XX
 XX 25-OCT-1996; 96WO-US017480.
 PF
 XX 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX WPI; 1997-259017/23.

DR WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA

PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,

PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 62; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the

CC synthesis, expression and/or stability of a mRNA encoding 1 or more

CC receptors of vascular endothelial growth factor (VEGF). A patient

CC (preferably human) having a condition associated with the level of the

CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing

CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour

CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be

CC treated by administering the nucleic acid molecule or the expression

CC vector to the patient. AAX67275 to AAX75752 represent specific examples

CC of nucleic acid molecules from the present invention

XX SQ Sequence 17 BP; 3 A; 3 C; 2 G; 0 T; 9 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 6.6e+02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 805 AACTGTAAGAAA 816

DB 14 AACTGTAAGAAA 3

RESULT 790

AAAX68751

ID AAX68751 standard; RNA; 17 BP.

XX AC AAX68751;

XX DT 28-JUL-1999 (first entry)

XX DE Human flt1 VEGF receptor hammerhead ribozyme substrate #46.

XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;

KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;

KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;

KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;

KW foetal liver kinase 1; ss.

OS Homo sapiens.

XX WO9715662-A2.

XX PD 01-MAY-1997.

XX PF 25-OCT-1996; 96WO-US017480.

XX PR 26-OCT-1995; 95US-0005974P.

PR 11-JAN-1996; 96US-00584040.

XX {RIBO-} RIBOZYME PHARM INC.

PA {CHIR } CHIRON CORP.

XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX PF 25-OCT-1996; 96WO-US017480.

XX PR 26-OCT-1995; 95US-0005974P.

PR 11-JAN-1996; 96US-00584040.

XX {RIBO-} RIBOZYME PHARM INC.

PA {CHIR } CHIRON CORP.

XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA

PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,

PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 48; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the

CC synthesis, expression and/or stability of a mRNA encoding 1 or more

CC receptors of vascular endothelial growth factor (VEGF). A patient

CC (preferably human) having a condition associated with the level of the

CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing

CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour

CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be

CC treated by administering the nucleic acid molecule or the expression

CC vector to the patient. AAX67275 to AAX75752 represent specific examples

CC of nucleic acid molecules from the present invention

XX SQ Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;

Best Local Similarity 50.0%; Pred. No. 6.6e+02;

Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 915 TGGTCTTTGGCT 926

DB 2 UGGUCUUUGCCU 13

RESULT 791

AAAX69220/c

ID AAX69220 standard; RNA; 17 BP.

XX AC AAX69220;

XX DT 28-JUL-1999 (first entry)

XX DE Human flt1 VEGF receptor hammerhead ribozyme substrate #515.

XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;

KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;

KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;

KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;

KW foetal liver kinase 1; ss.

XX OS Homo sapiens.

XX WO9715662-A2.

XX PD 01-MAY-1997.

XX PF 25-OCT-1996; 96WO-US017480.

XX PR 26-OCT-1995; 95US-0005974P.

PR 11-JAN-1996; 96US-00584040.

XX {RIBO-} RIBOZYME PHARM INC.

PA {CHIR } CHIRON CORP.

XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA

PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,

PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 62; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the

CC synthesis, expression and/or stability of a mRNA encoding 1 or more

CC receptors of vascular endothelial growth factor (VEGF). A patient

CC (preferably human) having a condition associated with the level of the

CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing

CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour

CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be

CC treated by administering the nucleic acid molecule or the expression

CC vector to the patient. AAX67275 to AAX75752 represent specific examples

CC of nucleic acid molecules from the present invention

XX SQ Sequence 17 BP; 3 A; 2 C; 2 G; 0 T; 10 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;


```
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 805 AACTGTAAGAAA 816
Db 15 AACTGTAAGAAA 4

RESULT 792
AAV02357/C
ID AAV02357 standard; RNA; 17 BP.
AC
AC AAV02357;
DT 27-AUG-2003 (revised)
DT 07-JUL-1998 (first entry)
XX
XX Pseudo-nitzschia heimii hypervariable region 3.
XX
XX Pseudo-nitzschia; hypervariable region; ribosomal RNA; toxic;
XX domoic acid; hybridisation; ss.
XX
XX Pseudo-nitzschia cf. hemeii.
XX
XX WO9744489-A1.
XX
XX 27-NOV-1997.
XX
XX 22-MAY-1997; 97WO-US008768.
XX
XX 22-MAY-1996; 96US-0018143P.
XX
XX (MONT-) MONTEREY BAY AQUARIUM RES INST.
XX
XX Scholin CA, Cangelosi GA, Haydock PV;
XX
XX WPI; 1998-018539/02.
XX
XX Probes for detecting individual species of Pseudo-nitzschia algae - based
XX on hypervariable regions of ribosomal RNA, used to detect toxic species
XX in sea water and marine organisms.
XX
XX WO9744489-A1.
XX
XX 27-NOV-1997.
XX
XX 22-MAY-1997; 97WO-US008768.
XX
XX 22-MAY-1996; 96US-0018143P.
XX
XX (MONT-) MONTEREY BAY AQUARIUM RES INST.
XX
XX Scholin CA, Cangelosi GA, Haydock PV;
XX
XX WPI; 1998-018539/02.
XX
XX Probes for detecting individual species of Pseudo-nitzschia algae - based
XX on hypervariable regions of ribosomal RNA, used to detect toxic species
XX in sea water and marine organisms.
XX
XX Claim 1; Page 58; 69pp; English.
XX
XX This sequence is a hypervariable region used in the detection of Pseudo-
XX nitzschia at species level from marine samples. It is specific to P.
XX heimii, and hybridises to hypervariable regions of its ribosomal RNA. It
XX is used to differentiate between toxic and non-toxic species (some
XX species of Pseudo-nitzschia produce domoic acid and this can poison
XX humans or other animals that have eaten shellfish that have consumed the
XX algae). (Updated on 27-AUG-2003 to correct OS field.)
XX
XX Sequence 17 BP; 2 A; 2 C; 8 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1283 ACAGCGCCAC 1294
Db 12 ACAGCGCCAC 1

RESULT 793
AAV02374
ID AAV02374 standard; DNA; 17 BP.
AC
AC AAV02374;
XX
XX 27-AUG-2003 (revised)
XX 07-JUL-1998 (first entry)
XX
XX Pseudo-nitzschia heimii probe heD2-2.
XX
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XX
XX Pseudo-nitzschia; hypervariable region; ribosomal RNA; toxic; probe;
XX domoic acid; hybridisation; ss.
XX
XX Synthetic.
XX
XX Pseudo-nitzschia cf. hemeii.
XX
XX WO9744489-A1.
XX
XX 27-NOV-1997.
XX
XX 22-MAY-1997; 97WO-US008768.
XX
XX 22-MAY-1996; 96US-0018143P.
XX
XX (MONT-) MONTEREY BAY AQUARIUM RES INST.
XX
XX Scholin CA, Cangelosi GA, Haydock PV;
XX
XX WPI; 1998-018539/02.
XX
XX Probes for detecting individual species of Pseudo-nitzschia algae - based
XX on hypervariable regions of ribosomal RNA, used to detect toxic species
XX in sea water and marine organisms.
XX
XX Disclosure; Page 11; 69pp; English.
XX
XX This is a probe used in the detection of Pseudo-nitzschia at species
XX level from marine samples. It is specific to P. heimii, and hybridises to
XX a hypervariable region (AAV02357) of its ribosomal RNA. It is used to
XX differentiate between toxic and non-toxic species (some species of Pseudo
XX nitzschia produce domoic acid and this can poison humans or other
XX animals that have eaten shellfish that have consumed the algae). (Updated
XX on 27-AUG-2003 to correct OS field.)
XX
XX Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1283 ACAGCGCCAC 1294
Db 6 ACAGCGCCAC 17

RESULT 794
AAV023740
ID AAV023740 standard; DNA; 17 BP.
XX
XX AC AAV023740;
XX
XX 19-JUL-1999 (first entry)
XX
XX PCR primer P1 used in nucleic acid synthesis.
XX
XX Nucleic acid synthesis; gene amplification; thermostable enzyme; PCR;
XX PCR inhibitor; PCR primer; ss.
XX
XX Synthetic.
XX
XX JP11113573-A.
XX
XX 27-APR-1999.
XX
XX 17-OCT-1997; 97JP-00284889.
XX
XX 17-OCT-1997; 97JP-00284889.
XX
XX (SHIMA) SHIMADZU CORP.
XX
XX WPI; 1999-320826/27.
XX
```

PT New method for synthesis of nucleic acids - involves pre-treatment of
 PT amplification solution.
 XX
 PS Example 1; Page 3; 4pp; Japanese.
 XX
 CC The invention provides a new method for nucleic acid synthesis that
 CC comprises pre-treatment of the gene amplification reaction solution,
 CC particularly at pH 8.1 or higher, optionally having an added polyamine,
 CC with added the sample at elevated temperatures, particularly at 70-90
 CC degrees C for 5-20 minutes, maintaining the temperature stability of the
 CC thermostable enzyme. The method is used for synthesis of nucleic acids by
 CC PCR, preferably for use on living body samples. The method allows
 CC effective direct synthesis of aimed DNA in living body samples containing
 CC PCR inhibitors; no need for isolating and purifying the nucleic acid.
 CC Sequences AAX37240-241 represent PCR primers used to exemplify the method
 CC of the invention
 XX
 SQ Sequence 17 BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 6.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1182 TCCCCGACAGAGA 1193
 Db 1 TCCCCGACAGAGA 12
 RESULT 795
 AAA36131/C
 ID AAA36131 standard; DNA; 17 BP.
 XX
 AC AAA36131;
 XX
 DT 26-JUL-2000 (first entry)
 XX
 DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:188.
 XX
 KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
 KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
 KW genomic classification; identification; DNA fingerprinting;
 KW tumour characterisation; hybridisation; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200018960-A2.
 XX
 PD 06-APR-2000.
 XX
 PF 24-SEP-1999; 99WO-US022283.
 XX
 PR 25-SEP-1998; 98US-0101757P.
 XX
 PA (MASI) MASSACHUSETTS INST TECHNOLOGY.
 XX
 PI Landers JE, Jordan B, Housman DE, Charest A;
 XX
 DR WPI; 2000-293181/25.
 XX
 PT Detection of single nucleotide polymorphisms in genomes by preparation
 PT and analysis of reduced complexity genomes, useful for genotyping,
 PT fingerprinting and determining allele frequency of SNPs.
 XX
 PS Disclosure; Page 59; 111pp; English.
 XX
 CC A method has been developed for detecting the presence or absence of a
 CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
 CC method comprises preparing a reduced complexity genome (RCG) from the
 CC genomic sample and analysing the RCG for the presence or absence of a SNP
 CC allele. The method can be used to characterise a tumour, to generate a
 CC genomic pattern for an individual genome or to generate a genomic
 CC classification code for a genome. The method can be used to assess
 CC whether a subject is at risk for developing a disease or to identify a

CC set of SNP alleles associated with a disease. The method can also be used
 CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
 CC used in the exemplification of the present invention. AAA35948 to
 CC AAA36632 represent nucleotide sequences containing SNPs
 XX
 SQ Sequence 17 BP; 1 A; 2 C; 5 G; 9 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 6.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 736 AAACAGACACACC 747
 Db 13 AAACAGACACACC 2

RESULT 796
 AAF02850/C
 ID AAF02850 standard; DNA; 17 BP.
 XX
 AC AAF02850;
 XX
 DT 16-FEB-2001 (first entry)
 XX
 DE Hammerhead ribozyme substrate #1145.
 XX
 KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200061729-A2.
 XX
 PD 19-OCT-2000.
 XX
 PF 11-APR-2000; 2000WO-US009721.
 XX
 PR 12-APR-1999; 99US-0129390P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Blatt L, Zwick M, Pavco P, Mcdwigg J;
 XX
 DR WPI; 2000-647423/62.
 XX
 PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 XX
 PS Claim 37; Page 82; 164pp; English.
 XX
 CC The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX
 SQ Sequence 17 BP; 1 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 12; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 6.6e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 823 GAGTGCACGAG 834
 Db 17 GAGTGCACGAG 6
 RESULT 797
 ABK00751

SQL Sequence 17 BP; 0 A; 9 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1238 CCTCGCCTCCG 1249
|||||
Db 2 CCTCGCCTCCG 13

RESULT 799
ABN00312
ID ABN00312 standard; DNA; 17 BP.
AC ABN00312;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:304.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
XX
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption/ionization, comprises human myosin-like protein hGDMPLP-1.
XX Disclosure; SEQ ID NO 304; 214pp; English.
XX
PS The present invention describes a human genome-derived myosin-like

CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1013 CTGAAAAAGAGG 1024
|||||
Db 5 CTGAAAAAGAGG 16

RESULT 800
ABN00315
ID ABN00315 standard; DNA; 17 BP.
AC ABN00315;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:307.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption/ionization, comprises human myosin-like protein hGDMPLP-1.
XX Disclosure; SEQ ID NO 307; 214pp; English.
XX
PS The present invention describes a human genome-derived myosin-like

CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 9 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGG 1024

DB 2 CTGAAAAGAGG 13

RESULT 801

ABN00314

ID ABN00314 standard; DNA; 17 BP.

XX AC ABN00314;

XX 29-MAY-2002 (first entry)

DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:306.

XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.

XX OS Homo sapiens.

XX FN WO200192524-A2.

XX PD 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX 30-JAN-2001; 2001WO-US000661.

XX 30-JAN-2001; 2001WO-US000662.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000666.

XX 30-JAN-2001; 2001WO-US000667.

XX 30-JAN-2001; 2001WO-US000668.

XX 30-JAN-2001; 2001WO-US000669.

XX 30-JAN-2001; 2001WO-US000670.

XX 05-FEB-2001; 2001US-0266860P.

XX (ASOM-) AECOMICA INC.

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption/ionization, comprises human myosin-like protein hGDMPLP-1.

XX Disclosure; SEQ ID NO 306; 214pp; English.

XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX

SQ Sequence 17 BP; 8 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGG 1024

DB 3 CTGAAAAGAGG 14

RESULT 802

ABN00311

ID ABN00311 standard; DNA; 17 BP.

XX AC ABN00311;

XX 29-MAY-2002 (first entry)

DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:303.

XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.

XX OS Homo sapiens.

XX FN WO200192524-A2.

XX PD 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX 30-JAN-2001; 2001WO-US000661.

XX 30-JAN-2001; 2001WO-US000662.

XX 30-JAN-2001; 2001WO-US000663.

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PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) ABOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 303; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1013 CTGAAAAAGAGG 1024
XX |||||
XX 6 CTGAAAAAGAGG 17
XX
XX RESULT 803
XX ABN00313
XX ID ABN00313 standard; DNA; 17 BP.
XX AC ABN00313;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:305.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX

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PD 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 30-JAN-2001; 2001WO-US000670.
XX 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) ABOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 305; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1
XX can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 7 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1013 CTGAAAAAGAGG 1024
XX |||||
XX 4 CTGAAAAAGAGG 15
XX
XX Db
XX
XX RESULT 804
XX ABA98975
XX ID ABA98975 standard; DNA; 17 BP.
XX AC ABA98975;
XX
XX 18-JUN-2002 (first entry)
XX

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XX Human asthma associated gene AAGB PCR primer #24.
DE
XX
XX Human; asthma; AAGB; antiinflammatory; antiasthmatic; ARDS; COPD; CODA;
KW inflammatory disease; obstructive airways disease; dyspnea; emphysema;
XX adult respiratory distress syndrome; chronic bronchitis; eosinophil;
KW chronic obstructive pulmonary disease; pneumoconiosis;
KW chronic obstructive airways disease; PCR; primer; ss.
XX
OS Homo sapiens.
XX
XX W0200206312-A2.
PN
XX
XX 24-JAN-2002.
PD
XX
XX 11-JUL-2001; 2001WO-EP008010.
PF
XX
XX 13-JUL-2000; 2000US-00615247.
PR
XX
XX (NOVS ) NOVARTIS AG.
PA (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
XX
XX Whittaker PA;
PI
XX
XX WPI; 2002-195799/25.
DR
XX
XX Novel polypeptide encoded by disease associated gene, useful for treating
PT an inflammatory or obstructive airways disease e.g., asthma.
PT
XX
XX Example 2; Page 27; 70pp; English.
PS
XX
XX The sequence represents a PCR primer used in the invention to amplify a
CC section of the AAGB gene. The invention relates to a novel asthma-
CC associated gene AAGB and the polypeptide encoded by AAGB. The polypeptide
CC of the invention has antiinflammatory and antiasthmatic activity, and may
CC have a use in gene therapy, or as a vaccine. The polypeptide,
CC polynucleotide, antibody and antisense oligonucleotide of the invention
CC (collectively referred to as agents) are useful for treating an
CC inflammatory or obstructive airways disease. They are also useful for are
CC useful for treating adult respiratory distress syndrome (ARDS), chronic
CC obstructive pulmonary or airways disease (COPD or CODA), including
CC chronic bronchitis or dyspnea associated with it, emphysema, exacerbation
CC of airways hyper-reactivity consequent to other drug therapy and
CC pneumoconiosis. The agents are also useful in the treatment of eosinophil
CC related disorders and asthma
XX
XX Sequence 17 BP; 0 A; 9 C; 2 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1238 CCTCTGCGCTCGG 1249
DB 2 CCTCTGCGCTCGG 13
RESULT 805
AAD22095/c
ID AAD22095 standard; DNA; 17 BP.
XX
XX AAD22095;
AC
XX
XX 12-FEB-2002 (first entry)
DT
XX Human SNP2-C allele specific oligonucleotide.
DE
XX
XX Human; Haplotype determination; single nucleotide polymorphism; SNP1;
KW P11; polymorphic locus; insulin-dependent diabetes mellitus; IDDM;
KW multiple sclerosis; Alzheimer's disease; eye colour; asthma; cancer;
KW neurofibromatosis type 2; cystic fibrosis; thalassaemia; phenylketonuria;
KW SNP1-G allele; ss.
XX

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OS Homo sapiens.
XX
XX W0200175163-A2.
PN
XX
XX 11-OCT-2001.
PD
XX
XX 30-MAR-2001; 2001WO-US010173.
PF
XX
XX 04-APR-2000; 2000US-0194425P.
PR
XX
XX (POLY-) POLYGENYX INC.
PA
XX
XX Landers JE;
PI
XX
XX WPI; 2002-010802/01.
DR
XX
XX Haplotyping comprises separately analyzing first and second alleles of
PT first and second single nucleotide polymorphisms of two different
PT polymorphic loci, and determining haplotype based on each allele
PT identification.
XX
XX Example 1; Page 34; 77pp; English.
PS
XX
XX The patent discloses high throughput methods for determining haplotypes.
CC Haplotyping comprises analyzing first and second alleles of a first
CC single nucleotide polymorphism (SNP1) of a first polymorphic locus (PL1)
CC by specifically capturing the nucleic acid sample on a surface,
CC separately analysing a second SNP of a polymorphic locus of a nucleic
CC acid sample to identify both alleles of SNP2, and determining the
CC haplotype based on the identification of each allele of each SNP. It is
CC method is useful for haplotyping a nucleic acid within a sample. It is
CC useful for screening DNA to identify polymorphic haplotypes, and
CC identification of haplotypes associated with predisposition to diseases
CC as well as other genetically associated traits. SNP haplo- typing is
CC useful in linkage disequilibrium studies for the analysis of complex
CC traits to localised genes involved in diseases such as insulin-dependent
CC diabetes mellitus (IDDM), multiple sclerosis, Alzheimer's disease and
CC asthma, diagnostic analysis to determine the presence or absence of a
CC predisposing disease haplotype or other trait, pharmacogenomic analysis
CC to identify haplotypes that correlates with either positive or negative
CC responses to drugs and development, genome-wide scan studies for complex
CC trait analysis using SNP haplotypes, instead of single SNPs to increase
CC the statistical power. The methods of the invention are useful for
CC identifying both normal phenotypes and disease phenotypes. They are
CC useful for the identification of traits such as eye colour and for
CC diagnostics to determine presence or absence of predisposing disease
CC haplotypes such as colon cancer, breast cancer, neurofibromatosis type 2,
CC cystic fibrosis, thalassaemia and phenylketonuria. Identification of
CC haplotypes associated with phenotypic traits is useful for identifying
CC predisposition to disease. The methods are also useful in prenatal
CC screening to identify whether a foetus is afflicted with or is
CC predisposed to develop a serious disease. The present DNA sequence is an
CC oligonucleotide which is specific for human SNP2-C allele
XX
XX Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1196 TGGCACCACCCCT 1207
DB 12 TGGCACCACCCCT 1
RESULT 806
ABK18246
ID ABK18246 standard; RNA; 17 BP.
XX
XX ABK18246;
AC
XX
XX 09-APR-2002 (first entry)
DT
XX

```

Human ERG hammerhead ribozyme target sequence, Seq ID No 893.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme; amberzyme.

Homo sapiens.

WO200188124-A2.

22-NOV-2001.

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021.

(RIBO-) RIBOZYME PHARM INC.

(GLAX) GLAXO GROUP LTD.

Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM; WPI; 2002-082995/11.

Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 75; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention

Sequence 17 BP; 4 A; 8 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1057 GCCCAACCCCA 1068
|||||||
Db 5 GCCCAACCCCA 16

RESULT 807

ABK18245
ID ABK18245 standard; RNA; 17 BP.
AC ABK18245;
DT 09-APR-2002 (first entry)
DE Human ERG hammerhead ribozyme target sequence, Seq ID No 893.
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme; amberzyme.
OS Homo sapiens.
PN WO200188124-A2.
PD 22-NOV-2001.
PF 16-MAY-2001; 2001WO-US015866.
PR 16-MAY-2000; 2000US-00572021.
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX) GLAXO GROUP LTD.
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
PI WPI; 2002-082995/11.
DR Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX Claim 4; Page 75; 149pp; English.
XX The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention

Sequence 17 BP; 4 A; 8 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1057 GCCCAACCCCA 1068
|||||||
Db 5 GCCCAACCCCA 16

QY 1057 GCCCAAAACCCA 1068
DB 6 GCCCAAAACCCA 17

RESULT 808
ABK18247

ID ABK18247 standard; RNA; 17 BP.
XX
AC ABK18247;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG hammerhead ribozyme target sequence, Seq ID No 894.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnarary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (GLAXO) GLAXO GROUP LTD.
XX
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX
XX Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX Claim 4; Page 75; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
XX treating a patient having a condition associated with the level of ERG,
XX by contacting cells of the patient with (I) under conditions suitable for
XX the treatment. The method comprises the use of one or more therapies
XX under conditions suitable for the treatment. Leukaemia or tumour
XX angiogenesis is treated by administering (I) to the patient in
XX conjunction with one or more of other therapies such as radiation or
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX cell, by contacting the cell with RNA. (I) is useful for cleaving RNA of
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
XX diseases related to the expression of ERG, and as diagnostic tool to
XX examine genetic drift and mutations within diseased cells or to detect
XX the presence of ERG RNA in a cell. (I) is useful for specifically
XX targeting genes that share homology with ERG gene or ERG fusion genes.
XX ABK17354-ABK22719 represent nucleic acids, including antisense and
XX enzymatic nucleic acid molecules which regulate expression of ERG, and

CC related PCR primers of the invention
XX
SQ Sequence 17 BP; 5 A; 8 C; 2 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred.No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1057 GCCCAAAACCCA 1068
DB 4 GCCCAAAACCCA 15

RESULT 809
ACC54066/C

ID ACC54066 standard; DNA; 17 BP.
XX
AC ACC54066;
XX
DT 27-JUN-2003 (first entry)
XX
DE Human tumour suppressor sequence #2833.
XX
KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW tumour regression; apoptosis; virus resistance; diagnosis;
KW cellular degeneration.
XX
OS Homo sapiens.
XX
PN FR2826373-A1.
XX
PD 27-DEC-2002.
XX
PF 20-JUN-2001; 2001FR-00008139.
XX
PR 20-JUN-2001; 2001FR-00008139.
XX
PA (MOLE-) MOLECULAR ENGINES LAB SA.
XX
XX Tuijnder M, Telerman A, Amson R;
XX WPI; 2003-250498/25.
XX
XX New nucleic acid sequences associated with tumor suppression, regression,
XX apoptosis or virus resistance are useful to diagnose and treat viral
XX disease, development of tumor cells and cell degeneration.
XX
XX Claim 1; Page 694; 798pp; French.
XX
XX This sequence represents an isolated nucleic acid sequence associated
XX with tumour suppression or regression, apoptosis or virus resistance. The
XX invention relates to these sequences or sequences having at least 80%
XX identity to them, and polypeptides encoded by the sequences or
XX polypeptides having 80% identity to the polypeptide sequences. The
XX invention is used to diagnose or treat viral disease or disease
XX characterized by development of tumour cells or cellular degeneration
XX
XX Sequence 17 BP; 5 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred.No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1118 TGCCCACTTCCA 1129
DB 16 TGCCCACTTCCA 5

RESULT 810
ABT34831

ID ABT34831 standard; DNA; 17 BP.
XX
AC ABT34831;

```
XX 12-JUN-2003 (first entry)
XX Tumour suppression related human fukutin oligo SEQ ID No 468.
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; protein chip; gene therapy; tumour suppression;
XX human fukutin; ds.
XX Homo sapiens.
XX WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX Disclosure; Page 88; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention
XX Sequence 17 BP; 3 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 12; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 1091 TCACCCCCACCC 1102
XX DB 3 TCACCCCCACCC 14
XX RESULT 811
XX ABT35836
XX ID ABT35836 standard; DNA; 17 BP.
XX AC ABT35836;
XX DT 12-JUN-2003 (first entry)
```

```
XX Tumour suppression related human fukutin oligo SEQ ID No 1473.
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; protein chip; gene therapy; tumour suppression;
XX human fukutin; ds.
XX Homo sapiens.
XX WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX Disclosure; Page 205; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention
XX Sequence 17 BP; 1 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 12; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 790 TGTCCTCTCTCT 801
XX DB 5 TGTCCTCTCTCT 16
XX RESULT 812
XX ACA06842/c
XX ID ACA06842 standard; RNA; 17 BP.
XX AC ACA06842;
XX DT 03-JUN-2003 (first entry)
XX NFKB sub-unit modulating inozyme substrate #661.
```

XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
KW gencitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
OS Homo sapiens.
XX
XX US2002177568-A1.
XX
XX 28-NOV-2002.
XX
XX 23-MAY-2001; 2001US-00864785.
XX
XX 07-DEC-1992; 92US-00987132.
XX 18-MAY-1994; 94US-00245466.
XX 15-AUG-1994; 94US-00291932.
XX 23-DEC-1996; 96US-00777916.
XX (STIN/) STINCHCOMB D T.
XX (MCSW/) MCSWIGGEN J.
XX (DRAP/) DRAPER K G.
XX
XX Stinchcomb DT, Mcswiggen J, Draper KG;
XX WPI; 2003-340953/32.
XX
XX Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX Claim 3; Page 36; 72pp; English.
XX
XX The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberyne
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
CC gencitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
XX Sequence 17 BP; 4 A; 6 C; 4 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 887 CAGTGTCTTGC 898
DB 12 CAGTGTCTTGC 1
RESULT 813
ID ABZ61529 standard; RNA; 17 BP.
XX
XX ABZ61529;
AC
XX 21-MAR-2003 (first entry)
DT
XX Human H-Ras DNzyme target #320.
DE
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX 06-JUN-2001; 2001US-0296249P.
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 117; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytosolic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 3 A; 7 C; 6 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 17;
XX Best Local Similarity 91.7%; Pred. No. 6.6e+02;
XX Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1231 GCGACAGCCCTC 1242
DB 6 GCGACAGCCCTC 17
RESULT 814
ABZ64920/C
ID ABZ64920 standard; RNA; 17 BP.
XX
XX AC ABZ64920;
XX

```
DT 21-MAR-2003 (first entry)
XX Human HER2 DNazyme substrate #377.
DE
XX
XX Human, ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
PN
XX
XX 05-DEC-2002.
PD
XX
XX 29-MAY-2002; 2002WO-US016840.
PF
XX
XX 29-MAY-2001; 2001US-0294140P.
PR
XX 06-JUN-2001; 2001US-0296249P.
PR
XX 10-SEP-2001; 2001US-0318471P.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
PI
XX WPI; 2003-140484/13.
DR
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 4; Page 140; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytosstatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 744 CACCGTGTGCAC 755
Db 16 CACCGTGTGCAC 5
RESULT 815
ABZ61857/c
ID ABZ61857 standard; RNA; 17 BP.
XX
XX ABZ61857;
AC
XX
XX 21-MAR-2003 (first entry)
DT
XX Human H-Ras DNazyme target #648.
DE
XX Human, ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
PN
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XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX
XX 06-JUN-2001; 2001US-0296249P.
XX
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX treating cancer, modulates the expression of a nucleic acid encoding
XX HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 4; Page 140; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytosstatic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 1 C; 8 G; 0 T; 6 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1255 ATCCCCAACCCC 1266
Db 17 ATCCCCAACCCC 6
RESULT 816
ABZ64921/c
ID ABZ64921 standard; RNA; 17 BP.
XX
XX ABZ64921;
AC
XX
XX 21-MAR-2003 (first entry)
DT
XX Human HER2 DNazyme substrate #378.
DE
XX Human, ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
PN
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
XX
XX 06-JUN-2001; 2001US-0296249P.
XX
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
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PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 4; Page 140; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ5989 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 7 C; 5 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 744 CACCGTGTGCAC 755
DB 14 CACCGTGTGCAC 3
RESULT 817
ACD56919/c
ID ACD56919 standard; RNA; 17 BP.
XX
AC ACD56919;
XX
XX 23-SEP-2003 (first entry)
XX
DE HCV DNzyme substrate sequence #65.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 03-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.

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PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Claim 1; Page 235; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNzyme or minus strand DNzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 6 G; 0 T; 4 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1202 CACCCCTATCAGG 1213
DB 16 CACCCCTATCAGG 5
RESULT 818
ACG65606
ID ACC65606 standard; DNA; 17 BP.
XX
AC ACC65606;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 2853.
DE
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
XX Mus musculus.
XX
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001FR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;

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XX WPI; 2003-333167/31.
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 364; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC68806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 3 A; 12 C; 1 G; 1 T; 0 U; 0 Other;
SQ

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1091 TCACCCGCCACCC 1102
Db 3 TCACCCGCCACCC 14
|||||
RESULT 819
ACC65172
ID ACC65172 standard; DNA; 17 BP.
XX
XX ACC65172;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 2419.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
XX Mus musculus.
XX
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001FR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijinder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 313; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC68806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX

CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 3 A; 3 C; 3 G; 8 T; 0 U; 0 Other;
SQ

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 900 CCTGGTCATTTT 911
Db 4 CCTGGTCATTTT 15
|||||
RESULT 820
AAL51596
ID AAL51596 standard; DNA; 17 BP.
XX
XX AAL51596;
XX
XX 10-APR-2003 (first entry)
XX
XX Human serine/threonine protein kinase NEK1 PCR primer #1.
XX
XX Human; PCR; primer; ss; gene therapy; serine/threonine protein kinase;
KW cancer; colon cancer; cardiovascular disorder; congestive heart failure;
KW central nervous system disorder; chronic obstructive pulmonary disease;
KW CNS disorder; diabetes; myocardial infarction; ischaemic heart disease;
KW arrhythmia; hypertensive; Alzheimer's disease; Parkinson's disease; NEK1;
KW peripheral pain; chronic pain.
XX
XX Homo sapiens.
XX
XX WO2003000873-A2.
XX
XX 03-JAN-2003.
XX
XX 21-JUN-2002; 2002WO-EP006879.
XX
XX 25-JUN-2001; 2001US-0300071P.
PR 16-NOV-2001; 2001US-0331447P.
PR 07-DEC-2001; 2001US-0336693P.
XX
XX (FARB) BAYER AG.
XX
XX Xiao Y;
XX
XX WPI; 2003-201424/19.
XX
XX New serine/threonine protein kinase NEK1 gene and protein, useful for
PT identifying modulators of serine/threonine protein kinase NEK1 activity,
PT and in gene therapy for treating cancer, diabetes, heart failure or
PT Alzheimer's disease.
XX
XX Example 12; Page 97; 156pp; English.
XX
XX The invention comprises the amino acid and coding sequence of the human
CC serine/threonine protein kinase NEK1. The DNA and protein sequences of
CC the invention are useful for modulating the activity of serine/threonine
CC kinase NEK1 in a disease, such as: cancer (particularly colon cancer);
CC cardiovascular disorders; central nervous system (CNS) disorders;
CC diabetes; and chronic obstructive pulmonary disease. In particular the
CC DNA and protein sequences of the invention are useful for treating:
CC congestive heart failure; myocardial infarction; ischaemic heart disease;
CC arrhythmia; hypertensive; Alzheimer's disease; Parkinson's disease; and
CC peripheral or chronic pain. The present DNA sequence represents a PCR
CC primer for the human serine/threonine protein kinase NEK1 coding sequence
XX
XX Sequence 17 BP; 4 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
SQ

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Query Match      0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1053 CCTGCCGCCAAA 1064
DB 5 CCTGCCGCCAAA 16

RESULT 821
AAZ48536
ID AAZ48536 standard; DNA; 18 BP.
XX AC AAZ48536;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18929.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX FF 26-JUN-1998; 98US-00106038.
XX PR 26-JUN-1998; 98US-00106038.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsett LM;
XX DR WPI; 2000-105333/09.
XX PT Antisense inhibition of tumor necrosis factor type 1 expression for
XX PT diagnosis, treatment and prevention of disease, particularly tumors.
XX PS Claim 1; Col 25; 34pp; English.
XX CC The invention provides antisense compounds targeted to human tumour
XX CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX CC can be used in a method of inhibiting the expression of TNFR1 human cells
XX CC or tissues. The antisense compounds specifically hybridize with one or
XX CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX CC produced. The antisense compounds and method are useful as research
XX CC reagents and diagnostics, and in the treatment and prophylaxis of
XX CC infection, inflammation or tumour formation. Sequences AAZ4852-565
XX CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX CC
SQ Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match      0.6%; Score 12; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 816 AAGCTGGAGTG 827
DB 2 AAGCTGGAGTG 13

RESULT 822
ABT05032
ID ABT05032 standard; DNA; 18 BP.
XX AC ABT05032;
XX DT 11-OCT-2002 (first entry)
XX DE Phosphorothioate oligonucleotide for AIDS therapy.
XX DE Phosphorothioate; HIV-1; azasugar; AIDS; virucide; antiviral; anti-HIV;
XX KW therapy; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkage"

```

XX TNFR1 expression modulation related antisense oligo SEQ ID No 62.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowsett LM, Zhang H, Dean NW;

XX WPI; 2002-593481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 7.8e+02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 816 AAGCTGGAGTG 827

DB 2 AAGCTGGAGTG 13

RESULT 823

ABV73834/C

ID ABV73834 standard; DNA; 20 BP.

XX AC ABV73834;

XX 08-JAN-2003 (first entry)

XX Phosphorothioate oligonucleotide for AIDS therapy.

XX Phosphorothioate; HIV-1; azasugar; AIDS; virucide; antiviral; anti-HIV; therapy; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX modified_base 1..20

XX /tag= a

XX /mod_base= OTHER

XX /note= "phosphorothioate linkage"

```

FT modified_base 1 /tag= b
FT FT /mod_base= OTHER
FT FT /note= "azasugar-containing adenosine derivative"
FT modified_base 7 /tag= c
FT FT /mod_base= OTHER
FT FT /note= "azasugar-containing adenosine derivative"
FT modified_base 13 /tag= d
FT FT /mod_base= OTHER
FT FT /note= "azasugar-containing adenosine derivative"
FT modified_base 19 /tag= e
FT FT /mod_base= OTHER
FT FT /note= "azasugar-containing adenosine derivative"
XX
XX WO200268582-A2.
XX
XX 06-SEP-2002.
XX
XX 27-FEB-2002; 2002WO-KR000325.
XX
XX 27-FEB-2001; 2001KR-00009914.
XX
XX (DONG-) DONGBU HANNONG CHEM CO LTD.
XX
XX Bae Y, Lee D, Lim H, Kim S, Lee K, Jung K;
XX WPI; 2002-750412/81.
XX
XX New phosphorothioate oligonucleotides useful in the treatment of AIDS.
XX
XX Claim 3; Page 41; 120pp; English.
XX
XX The present sequence is that of a phosphorothioate oligonucleotide of
XX random sequence which includes 4 six-membered azasugar nucleotide
XX derivatives. It is a claimed example of oligonucleotides of the invention
XX (see ABV73816-41) that have been tested as AIDS therapeutic agents. In
XX anti-HIV-1 assays, the oligonucleotide showed higher antiviral activity
XX than AZT, ddC and ddI, and antiviral activity was resistant to the
XX effects of serum. Claimed oligonucleotides of the present invention have
XX low toxicity against cells, are membrane permeable, working outside of
XX cells to inhibit viral attachment of HIV, have a wide antiviral activity
XX against a broad spectrum of HIV variants, are not active against other
XX viruses including HIV. The resistance of the present oligonucleotide to
XX serum allows its use as an AIDS therapeutic drug in vivo
XX
XX Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 20;
XX Best Local Similarity 75.0%; Pred. No. 1e+03;
XX Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
XX QY 280 CTGCTGCTGGCGCTGCTGCT 299
XX ||| ||| ||| ||| ||| ||| |||
XX Db 20 CTGGAGCTGGAGCTGGAGCT 1
XX
XX RESULT 824
XX AAV55821/c
XX ID AAV55821 standard; DNA; 24 BP.
XX
XX AC AAV55821;
XX
XX 27-AUG-2003 (revised)
XX 18-NOV-1998 (first entry)
XX
XX Multimerisation of minimal motifs using primer ZGY2.
XX
XX Fusion protein; stabilising polypeptide; proteolytic degradation;
XX resistance; half-life; autoimmune disease; inflammation; nitro drug;
XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;

```

```

KW nitroreductase protein; enzyme therapy; prodrug therapy; protease;
KW cancer; pathological condition; minimal motif; PCR primer; ss.
XX
XX Synthetic.
XX Human herpesvirus 4.
XX
XX WO9822577-A1.
XX
XX 28-MAY-1998.
XX
XX 17-NOV-1997; 97WO-IB001508.
XX
XX 15-NOV-1996; 96US-0030986P.
XX
XX 25-JUN-1997; 97US-0048945P.
XX
XX (MASU/) MASUCCI M G.
XX
XX Masucci MG;
XX
XX WPI; 1998-312463/27.
XX
XX New fusion proteins resistant to proteolytic degradation - comprising a
XX core protein with a stabilising polypeptide comprising a peptide sequence
XX containing glycine repeats.
XX
XX Disclosure; Page 72; 120pp; English.
XX
XX Sequences shown in AAV55812 to AAV55827 represent primers used in the
XX course of the invention for the multimerisation of minimal motifs. The
XX invention provides a method for increasing the resistance of a core
XX protein to proteolytic degradation that comprises linking or inserting
XX onto or into the core protein a stabilising polypeptide of formula
XX [(Glya)X(Glyb)Y(Glyc)Z]n where Glya, Glyb, Glyc are 1-6 sequential Gly
XX residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
XX and n can be anything between 1-66. X, Y and Z need not be identical from
XX n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
XX polypeptide can be linked onto or inserted into a nucleic acid encoding a
XX core protein. The fusion proteins of the invention are more resistant to
XX degradation by proteases and, thus, have a longer half-life than the
XX unfused core protein. The products can be used for treating autoimmune
XX diseases, cancer and inflammation. In particular, the core protein may be
XX an IkappaB regulator protein for the treatment of inflammatory bowel
XX disease, or a nitroreductase protein which can activate nitro drugs in
XX enzyme/prodrug therapy to treat cancer or other pathological conditions.
XX The fusion proteins can also be used in diagnostic methods such as in
XX vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
XX
XX Sequence 24 BP; 5 A; 13 C; 2 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 24;
XX Best Local Similarity 75.0%; Pred. No. 1.5e+03;
XX Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
XX QY 1508 TGGAGCTGCTGGAGCGGTG 1527
XX ||| ||| ||| ||| ||| ||| |||
XX Db 23 TGGAGCTGAGCTGGCGGTG 4
XX
XX RESULT 825
XX AAT29547/c
XX ID AAT29547 standard; DNA; 14 BP.
XX
XX AC AAT29547;
XX
XX 20-DEC-1996 (first entry)
XX
XX Primer #8 for FseI modification methylation.
XX
XX Restriction endonuclease; FseI; modification methylation; palindromic DNA;
XX Fraklia species NRRL 18528; cytosine methylase; 5-methyl cytosine motif;
XX alpha-N4 cytosine motif; beta-N4 cytosine methylase motif; enzyme; PCR;
XX DNA cloning; primer; amplify; polymerase chain reaction; ss.
XX
XX

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OS Synthetic.
XX EP712933-A2.
PN gene - for measuring mRNA expression in cancer cells for diagnosing
XX cancer.
PD 22-MAY-1996.
XX
PF 12-OCT-1995; 95BP-00307228.
XX
PR 18-OCT-1994; 94US-00325509.
XX
XX (NEWE ) NEW ENGLAND BIOLABS INC.
XX Morgan RD;
XX
XX WPI; 1996-240719/25.
XX
XX DNA encoding restriction endonuclease FseI - useful in DNA manipulation,
PT also new method for cloning endonuclease and associated methylase.
PT
XX
XX Example 1; Page 10; 36pp; English.
XX
XX AAT29540-T29559 represent amplification primers for the FseI modification
CC methylase. These sequence are all based on cytosine methylase conserved
CC sequences. AAT29540-T29549 are based on the 5-methyl-cytosine motif.
CC AAT29550 and AAT29551 are based on the alpha type of N-4 cytosine
CC methylase motifs, while AAT29552-T29559 are based on the beta type of N-4
CC cytosine methylase motifs. The FseI modification methylase, and
CC restriction endonuclease was isolated from Frankia species NRRL 18528.
CC FseI recognises the palindromic DNA sequence GGCGGCC (from 5' to 3'),
CC and cleaves it between the second GC to leave a 4 base 3' overhang. The
CC FseI modification methylase contains copies of the 5-methyl cytosine,
CC alpha-N4 cytosine, and beta-N4 cytosine methylase motifs. The methylase
CC and endonuclease genes were observed to overlap by 12 nucleotides. This
CC enzyme can be used for cloning and rearranging DNA, the same as known
CC restriction enzymes. Recombinant expression of FseI allows for over
CC expression of this enzyme in pure form, without the contaminants present
CC in conventional preparation methods
XX
XX Sequence 14 BP; 1 A; 4 C; 0 G; 5 T; 0 U; 4 Other;
SQ
Query Match 0.5%; Score 11.8; DB 1; Length 14;
Best Local Similarity 71.4%; Pred. No. 4.1e+02;
Matches 10; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
XX
QY 853 GAGAACTTTAAGG 866
DB ||:||:||:||:||
14 GAAAYGTNAAGG 1
RESULT 826
AAQ43440/C
ID AAQ43440 standard; DNA; 15 BP.
XX
XX AAQ43440;
AC
XX
DT 10-DEC-1993 (first entry)
XX
DE Tumour-related protein detecting probe.
XX
XX Tumour-related protein; silencer; catalase; cancer; diagnosis; ds.
XX
XX Synthetic.
XX
XX JF05146294-A.
PN
XX 15-JUN-1993.
PD
XX
XX 27-NOV-1991; 91JP-00312476.
XX
XX 27-NOV-1991; 91JP-00312476.
PR
XX (SANY ) SANKYO CO LTD.
PA
XX
XX

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DR WPI; 1993-223532/28.
XX
PT Tumour-related protein binding to silencer sequence of rat liver catalase
PT gene - for measuring mRNA expression in cancer cells for diagnosing
PT cancer.
XX
XX Disclosure; Page 3; 16pp; Japanese.
XX
XX The 5' end of the antisense strand overhangs the sense strand by 5 bases.
CC mRNA was prepd. from rat AH60c strain. cDNA library was prepd. using
CC lambda gt12 and lambda ZAP. The probe was 32p labelled. pKX233-2 was used
CC as expression vector. The vector was digested by NcoI and HindIII for
CC ligation and pSW35-1 was obtained
XX
XX Sequence 15 BP; 1 A; 0 C; 11 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.5%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 5.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1052 CCCTGGCCCCCAACC 1066
DB ||||| ||||| |||||
15 CCCTCCCCCAACC 1
RESULT 827
AAT55041
ID AAT55041 standard; RNA; 15 BP.
XX
XX AAT55041;
AC
XX 25-MAR-2003 (revised)
DT 18-APR-1997 (first entry)
XX
XX Human relA hammerhead ribozyme target sequence (nt. position 335).
XX
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX intercellular adhesion molecule; rel A; tumour necrosis factor;
XX INF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX translocation; chronic myelogenous leukaemia; CML; cancer;
XX Philadelphia chromosome; inflammation; autoimmune disease;
XX atherosclerosis; myocardial infarction; stroke; restenosis;
XX transplant rejection; rheumatoid arthritis; psoriasis;
XX myocardial ischaemia; Kawasaki disease; septic shock; HIV;
XX human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX
XX Homo sapiens.
OS
XX
XX WO9523225-A2.
PN
XX
XX 31-AUG-1995.
PD
XX
XX 23-FEB-1995; 95WO-IB000156.
XX
XX 23-FEB-1994; 94US-00201109.
PR
XX 23-MAR-1994; 94US-00218934.
PR
XX 04-APR-1994; 94US-00222795.
PR
XX 07-APR-1994; 94US-00224483.
PR
XX 15-APR-1994; 94US-00227958.
PR
XX 15-APR-1994; 94US-00228041.
PR
XX 18-MAY-1994; 94US-00245736.
PR
XX 06-JUL-1994; 94US-00271280.
PR
XX 15-AUG-1994; 94US-00291932.
PR
XX 16-AUG-1994; 94US-00291433.
PR
XX 17-AUG-1994; 94US-00292620.
PR
XX 19-AUG-1994; 94US-00293520.
PR
XX 02-SEP-1994; 94US-00300000.
PR
XX 08-SEP-1994; 94US-00303039.
PR
XX 23-SEP-1994; 94US-00311486.
PR
XX 23-SEP-1994; 94US-00311749.
PR
XX 28-SEP-1994; 94US-00314397.
PR

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PR 03-OCT-1994; 94US-00316771.
 PR 07-OCT-1994; 94US-00319492.
 PR 11-OCT-1994; 94US-00321993.
 PR 04-NOV-1994; 94US-00334847.
 PR 10-NOV-1994; 94US-00337608.
 PR 28-NOV-1994; 94US-00345516.
 PR 16-DEC-1994; 94US-00357577.
 PR 23-DEC-1994; 94US-00363233.
 PR 30-JAN-1995; 95US-00380734.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
 PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
 PI Tracz D, Usman N, Wincott FE, Woolf T;
 XX
 XX WPI; 1995-351090/45.
 XX
 XX Ribozymes having modified bases and methods for producing them - for use
 PT in inhibiting disease related genes.
 XX
 PS Claim 2; Page 228; 407pp; English.
 XX
 CC The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
 CC nucleotide base position indicated in the DE line. The relA gene product
 CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
 CC specifically in the induction of inflammatory responses. Regions of the
 CC mRNA that do not form secondary folding structures and that contain
 CC potential hammerhead and hairpin ribozyme cleavage sites were identified
 CC by computer analysis. Ribozymes directed against these mRNA sequences
 CC were designed and synthesised with modifications that improve their
 CC nuclease resistance. The ribozymes are designed to cleave the target
 CC sequences and thereby inhibit relA expression, making them potentially
 CC useful for treating rheumatoid arthritis, restenosis and asthma as well
 CC as for increasing tolerance to transplanted tissues. The potential
 CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means
 CC that uses are limited to local delivery, acute indications or ex vivo
 CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
 XX
 XX Sequence 15 BP; 2 A; 10 C; 2 G; 0 T; 1 U; 0 Other;
 SQ Query Match 0.5%; Score 11.8; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 5.1e+02;
 Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1085 CAGGCTTCACCCCA 1099
 Db | | | | | | | | | |
 1 CCGGCCUCACCCCA 15
 RESULT 828
 AAT54833/c
 ID AAT54833 standard; RNA; 15 BP.
 XX
 AC AAT54833;
 XX
 XX
 DT 25-MAR-2003 (revised)
 DT 07-APR-1997 (first entry)
 XX
 XX Mouse relA hammerhead ribozyme target sequence (nt. position 616).
 DE
 XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
 KW translocation; chronic myelogenous leukaemia; CML; cancer;
 KW Philadelphia chromosome; inflammation; autoimmune disease;
 KW atherosclerosis; myocardial infarction; stroke; restenosis;
 KW transplant rejection; rheumatoid arthritis; psoriasis;
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

KW ss.
 XX Mus musculus.
 OS WO9523225-A2.
 PN 31-AUG-1995.
 XX
 XX 23-FEB-1995; 95WO-IB000156.
 XX
 XX 23-FEB-1994; 94US-00201109.
 PR 29-MAR-1994; 94US-00218934.
 PR 04-APR-1994; 94US-00222795.
 PR 07-APR-1994; 94US-00224483.
 PR 15-APR-1994; 94US-00227958.
 PR 18-MAY-1994; 94US-00228041.
 PR 06-JUL-1994; 94US-00245736.
 PR 15-AUG-1994; 94US-00291932.
 PR 17-AUG-1994; 94US-00292620.
 PR 19-AUG-1994; 94US-00293520.
 PR 02-SEP-1994; 94US-00300000.
 PR 08-SEP-1994; 94US-00303039.
 PR 23-SEP-1994; 94US-00311486.
 PR 28-SEP-1994; 94US-00311749.
 PR 03-OCT-1994; 94US-00314397.
 PR 11-OCT-1994; 94US-00319492.
 PR 04-NOV-1994; 94US-00321993.
 PR 10-NOV-1994; 94US-00334847.
 PR 28-NOV-1994; 94US-00337608.
 PR 16-DEC-1994; 94US-00345516.
 PR 30-JAN-1995; 94US-00357577.
 PR 94US-00363233.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
 PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
 PI Tracz D, Usman N, Wincott FE, Woolf T;
 XX
 XX WPI; 1995-351090/45.
 XX
 XX Ribozymes having modified bases and methods for producing them - for use
 PT in inhibiting disease related genes.
 XX
 PS Claim 2; Page 225; 407pp; English.
 XX
 CC The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
 CC nucleotide base position indicated in the DE line. The relA gene product
 CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
 CC specifically in the induction of inflammatory responses. Regions of the
 CC mRNA that do not form secondary folding structures and that contain
 CC potential hammerhead and hairpin ribozyme cleavage sites were identified
 CC by computer analysis. Ribozymes directed against these mRNA sequences
 CC were designed and synthesised with modifications that improve their
 CC nuclease resistance. The ribozymes are designed to cleave the target
 CC sequences and thereby inhibit relA expression, making them potentially
 CC useful for treating rheumatoid arthritis, restenosis and asthma as well
 CC as for increasing tolerance to transplanted tissues. The potential
 CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means
 CC that uses are limited to local delivery, acute indications or ex vivo
 CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
 XX
 XX Sequence 15 BP; 2 A; 7 C; 1 G; 0 T; 5 U; 0 Other;
 SQ Query Match 0.5%; Score 11.8; DB 1; Length 15;
 Best Local Similarity 86.7%; Pred. No. 5.1e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1272 GAAGTGGAGGACAG 1286
 DB 15 GATGTGAGGACAG 1

RESULT 829
 AAT52281
 ID AAT52281 standard; RNA; 15 BP.
 XX
 AC AAT52281;
 XX
 DT 25-MAR-2003 (revised)
 DT 02-APR-1997 (first entry)
 XX
 DE Mouse ICAM hammerhead ribozyme target sequence (nt. position 988).
 XX
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
 KW Philadelphia chromosome; chronic myelogenous leukaemia; CML; cancer;
 KW atherosclerosis; myocardial infarction; autoimmune disease;
 KW transplant rejection; rheumatoid arthritis; stroke; restenosis;
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
 KW ss.
 OS Mus musculus.
 XX
 XX
 FN WO9523225-A2.
 XX
 PD 31-AUG-1995.
 XX
 XX
 PF 23-FEB-1995; 95WO-IB000156.
 XX
 PR 23-FEB-1994; 94US-00201109.
 PR 29-MAR-1994; 94US-00218934.
 PR 04-APR-1994; 94US-00222795.
 PR 15-APR-1994; 94US-00224483.
 PR 15-APR-1994; 94US-00227958.
 PR 18-MAY-1994; 94US-00228041.
 PR 06-JUL-1994; 94US-00271280.
 PR 15-AUG-1994; 94US-00291932.
 PR 16-AUG-1994; 94US-00291433.
 PR 17-AUG-1994; 94US-00292620.
 PR 19-AUG-1994; 94US-00293520.
 PR 02-SEP-1994; 94US-00300000.
 PR 08-SEP-1994; 94US-00303039.
 PR 23-SEP-1994; 94US-00311486.
 PR 23-SEP-1994; 94US-00311749.
 PR 28-SEP-1994; 94US-00314397.
 PR 03-OCT-1994; 94US-00316771.
 PR 07-OCT-1994; 94US-00319482.
 PR 11-OCT-1994; 94US-00321993.
 PR 04-NOV-1994; 94US-00334847.
 PR 10-NOV-1994; 94US-00337608.
 PR 28-NOV-1994; 94US-00345516.
 PR 16-DEC-1994; 94US-00357577.
 PR 23-DEC-1994; 94US-00363233.
 PR 30-JAN-1995; 95US-00380734.
 XX
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 XX
 PI Stinchcomb DT, Chowira B, Dorenzo A, Draper KG, Dudycz LW;
 PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Svedler D, Thompson JD;
 PI Tracz D, Usman N, Wincott FE, Woolf T;
 XX
 DR WPT; 1995-351090/45.
 XX

PT Ribozymes having modified bases and methods for producing them - for use
 PT in inhibiting disease related genes.
 XX
 PS Claim 2; Page 178; 407pp; English.
 XX
 CC The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
 CC nucleotide base position indicated in the DE line. Regions of the mRNA
 CC that do not form secondary folding structures and that contain potential
 CC hammerhead and hairpin ribozyme cleavage sites were identified by
 CC computer analysis. Ribozymes directed against these mRNA sequences were
 CC designed and synthesised with modifications that improve their nuclease
 CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
 CC inhibit ICAM-1 expression, making them useful for reducing transplant
 CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
 CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
 CC correct PI field.)
 XX
 SQ Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;
 Query Match 0.5%; Score 11.8; DB 1; Length 15;
 Best Local Similarity 60.0%; Pred. No. 5.1e-02;
 Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
 QY 1170 CAACTTGGCGCTCC 1184
 DB 1 CAACUUUUCAGCUCC 15

RESULT 830
 AAT5092
 ID AAT5092 standard; RNA; 15 BP.
 XX
 AC AAT5092;
 XX
 DT 25-MAR-2003 (revised)
 DT 21-APR-1997 (first entry)
 XX
 DE Human relA hammerhead ribozyme target sequence (nt. position 1250).
 XX
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
 KW translocation; chronic myelogenous leukaemia; CML; cancer;
 KW Philadelphia chromosome; inflammation; autoimmune disease;
 KW atherosclerosis; myocardial infarction; stroke; restenosis;
 KW transplant rejection; rheumatoid arthritis; psoriasis;
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
 KW ss.
 XX
 XX
 OS Homo sapiens.
 XX
 XX
 PN WO9523225-A2.
 XX
 PD 31-AUG-1995.
 XX
 XX
 PF 23-FEB-1995; 95WO-IB000156.
 PR 23-FEB-1994; 94US-00201109.
 PR 29-MAR-1994; 94US-00218934.
 PR 04-APR-1994; 94US-00222795.
 PR 07-APR-1994; 94US-00224483.
 PR 15-APR-1994; 94US-00227958.
 PR 15-APR-1994; 94US-00228041.
 PR 18-MAY-1994; 94US-00245736.
 PR 06-JUL-1994; 94US-00271280.
 PR 15-AUG-1994; 94US-00291932.
 PR 16-AUG-1994; 94US-00291433.
 PR 17-AUG-1994; 94US-00292620.
 PR 19-AUG-1994; 94US-00293520.
 PR 02-SEP-1994; 94US-00300000.

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PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 28-SEP-1994; 94US-00311749.
PR 03-OCT-1994; 94US-00314397.
PR 07-OCT-1994; 94US-00316771.
PR 11-OCT-1994; 94US-00319492.
PR 04-NOV-1994; 94US-00321993.
PR 10-NOV-1994; 94US-00334847.
PR 28-NOV-1994; 94US-00337608.
PR 16-DEC-1994; 94US-00345516.
PR 23-DEC-1994; 94US-00357577.
PR 30-JAN-1995; 94US-00363233.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX STinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
XX Ribozyms having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX Claim 2; Page 229; 407pp; English.
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
CC nucleotide base position indicated in the DE line. The relA gene product
CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
CC specifically in the induction of inflammatory responses. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit relA expression, making them potentially
CC useful for treating rheumatoid arthritis, restenosis and asthma as well
CC as for increasing tolerance to transplanted tissues. The potential
CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means
CC that uses are limited to local delivery, acute indications or ex vivo
CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX Sequence 15 BP; 2 A; 9 C; 3 G; 0 T; 1 U; 0 Other;
XX Query Match 0.5%; Score 11.8; DB 1; Length 15;
XX Best Local Similarity 80.0%; Pred. NO. 5.1e+02;
XX Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 1084 CCAGGCTTCACCCC 1098
DB |||||: |||||
1 CCAGGCGCCAGCCCC 15
RESULT 831
AAT54944
ID AAT54944 standard; RNA; 15 BP.
AC AAT54944;
XX 25-MAR-2003 (revised)
DT 07-APR-1997 (first entry)
XX Mouse relA hammerhead ribozyme target sequence (nt. position 1082).
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;

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KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX Mus musculus.
XX WO9523225-A2.
XX 31-AUG-1995.
XX 23-FEB-1995; 95WO-IB000156.
XX 23-FEB-1994; 94US-00201109.
XX 29-MAR-1994; 94US-00218934.
XX 04-APR-1994; 94US-00222795.
XX 07-APR-1994; 94US-00224483.
XX 15-APR-1994; 94US-00227958.
XX 15-APR-1994; 94US-00228041.
XX 18-MAY-1994; 94US-00245736.
XX 06-JUL-1994; 94US-00271280.
XX 15-AUG-1994; 94US-00291932.
XX 16-AUG-1994; 94US-00291433.
XX 17-AUG-1994; 94US-00292620.
XX 19-AUG-1994; 94US-00293520.
XX 02-SEP-1994; 94US-00300000.
XX 08-SEP-1994; 94US-00303039.
XX 23-SEP-1994; 94US-00311486.
XX 28-SEP-1994; 94US-00311749.
XX 03-OCT-1994; 94US-00314397.
XX 07-OCT-1994; 94US-00316771.
XX 11-OCT-1994; 94US-00319492.
XX 04-NOV-1994; 94US-00321993.
XX 10-NOV-1994; 94US-00334847.
XX 28-NOV-1994; 94US-00337608.
XX 16-DEC-1994; 94US-00345516.
XX 23-DEC-1994; 94US-00357577.
XX 30-JAN-1995; 94US-00363233.
XX 95US-00380734.
XX (RIBO-) RIBOZYME PHARM INC.
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
XX Ribozyms having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX Claim 2; Page 226; 407pp; English.
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
CC nucleotide base position indicated in the DE line. The relA gene product
CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
CC specifically in the induction of inflammatory responses. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit relA expression, making them potentially
CC useful for treating rheumatoid arthritis, restenosis and asthma as well
CC as for increasing tolerance to transplanted tissues. The potential
CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means
CC that uses are limited to local delivery, acute indications or ex vivo
CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX Sequence 15 BP; 4 A; 5 C; 3 G; 0 T; 3 U; 0 Other;

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